```
     FILE 'REGISTRY' ENTERED AT 09:29:25 ON 10 DEC 2008
L1             STRUCTURE UPLOADED
L2           50 S L1
L3        15948 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 09:30:58 ON 10 DEC 2008
L4         6873 S L3

     FILE 'REGISTRY' ENTERED AT 09:31:10 ON 10 DEC 2008
L5             STRUCTURE UPLOADED
L6           45 S L5
L7         6574 S L5 SSS FULL
L8         9374 S L3 NOT L7
L9             STRUCTURE UPLOADED
L10          50 S L9
L11        5859 S L9 SSS FULL
L12        3518 S L8 NOT L11

     FILE 'HCAPLUS' ENTERED AT 09:34:25 ON 10 DEC 2008
L13        1452 S L12
L14        1009 S L12/PREP

     FILE 'REGISTRY' ENTERED AT 09:34:50 ON 10 DEC 2008
L15            STRUCTURE UPLOADED
L16            STRUCTURE UPLOADED
L17            STRUCTURE UPLOADED
L18         135 S L15  SUB=L12 FULL
L19         818 S L16  SUB=L12 FULL
L20        1352 S L17  SUB=L12 FULL
L21        3383 S L12 NOT L18
L22        2567 S L21 NOT L19
L23        1221 S L22 NOT L20

     FILE 'HCAPLUS' ENTERED AT 09:40:15 ON 10 DEC 2008
L24         740 S L23
L25         561 S L23/PREP

     FILE 'STNGUIDE' ENTERED AT 09:40:30 ON 10 DEC 2008

     FILE 'REGISTRY' ENTERED AT 09:45:51 ON 10 DEC 2008
L26            STRUCTURE UPLOADED
L27        1024 S L26  SUB=L23 FULL
L28            STRUCTURE UPLOADED
L29          12 S L28  SUB=L27 FULL
L30            STRUCTURE UPLOADED
L31         110 S L30  SUB=L27 FULL

     FILE 'HCAPLUS' ENTERED AT 09:49:12 ON 10 DEC 2008
L32          52 S L31
L33          42 S L32 AND (PY<2003 OR AY<2003 OR PRY<2003)
```

```
=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 09:29:25 ON 10 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES:    8 DEC 2008  HIGHEST RN 1082116-14-0
DICTIONARY FILE UPDATES:   8 DEC 2008  HIGHEST RN 1082116-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s l1
L1 NOT FOUND
The L-number entered has not been defined in this session, or it
has been deleted.  To see the L-numbers currently defined in this
session, enter DISPLAY HISTORY at an arrow prompt (=>).

=>
Uploading C:\Program Files\STNEXP\Queries\10524048generic.str
```

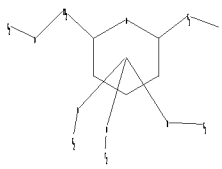

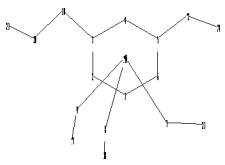

chain nodes :
7 8 9 10 12 17 18 20 21 23 24
ring nodes :
1 2 3 4 5 6
chain bonds :
3-10 5-12 7-23 8-18 9-17 10-20 12-24 20-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-12 7-23 8-18 9-17 12-24 20-21
exact bonds :
3-10 10-20

G1:O,S

G2:C,H

G3:C,S,P

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS

12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 20:CLASS 21:CLASS
23:CLASS 24:CLASS

L1   STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 09:30:16 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   16061 TO ITERATE

 12.5% PROCESSED   2000 ITERATIONS   50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 313629 TO   328811
PROJECTED ANSWERS: 13600 TO   16914

L2   50 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 09:30:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   323752 TO ITERATE

100.0% PROCESSED   323752 ITERATIONS   15948 ANSWERS
SEARCH TIME: 00.00.02

L3   15948 SEA SSS FUL L1

=> file hcaplus
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                      ENTRY   SESSION
FULL ESTIMATED COST   179.28   179.49

FILE 'HCAPLUS' ENTERED AT 09:30:58 ON 10 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 10 Dec 2008 VOL 149 ISS 24
FILE LAST UPDATED: 9 Dec 2008 (20081209/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

```
 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s l3
L4        6873 L3

=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.69     182.18

FILE 'REGISTRY' ENTERED AT 09:31:10 ON 10 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES:    8 DEC 2008  HIGHEST RN 1082116-14-0
DICTIONARY FILE UPDATES:   8 DEC 2008  HIGHEST RN 1082116-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> log hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.46     182.64

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:31:12 ON 10 DEC 2008

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 09:31:59 ON 10 DEC 2008
FILE 'REGISTRY' ENTERED AT 09:31:59 ON 10 DEC 2008
COPYRIGHT (C) 2008 American Chemical Society (ACS)

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
```
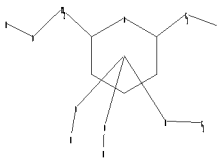
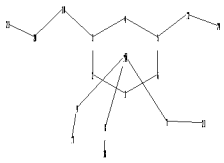

	ENTRY	SESSION
FULL ESTIMATED COST	0.46	182.64

=>
Uploading C:\Program Files\STNEXP\Queries\10524048not2.str





chain nodes :
7 8 9 10 12 17 18 20 21 23 24
ring nodes :
1 2 3 4 5 6
chain bonds :
3-10 5-12 7-23 8-18 9-17 10-20 12-24 20-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-12 7-23 12-24
exact bonds :
3-10 8-18 9-17 10-20 20-21

G1:O,S

```
G2:C,H

G3:C,S,P

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS  10:CLASS
12:CLASS  13:CLASS  14:CLASS  15:CLASS  17:CLASS  18:CLASS  20:CLASS  21:CLASS
23:CLASS  24:CLASS




L5      STRUCTURE UPLOADED

=> s l5
SAMPLE SEARCH INITIATED 09:32:21 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    16061 TO ITERATE

 12.5% PROCESSED     2000 ITERATIONS                              45 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       313629 TO   328811
PROJECTED ANSWERS:            6087 TO     8367

L6           45 SEA SSS SAM L5

=> s l5 sss full
FULL SEARCH INITIATED 09:32:25 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   323752 TO ITERATE

100.0% PROCESSED   323752 ITERATIONS                          6574 ANSWERS
SEARCH TIME: 00.00.02

L7         6574 SEA SSS FUL L5

=> s l3 not l5
L3 MAY NOT BE USED HERE
The L-number entered was not created by a STRUCTURE or SCREEN command.

=> s l3 not l7
L8        9374 L3 NOT L7

=> d his

     (FILE 'HOME' ENTERED AT 09:29:04 ON 10 DEC 2008)

     FILE 'REGISTRY' ENTERED AT 09:29:25 ON 10 DEC 2008
L1             STRUCTURE UPLOADED
L2          50 S L1
L3       15948 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 09:30:58 ON 10 DEC 2008
L4        6873 S L3

     FILE 'REGISTRY' ENTERED AT 09:31:10 ON 10 DEC 2008
L5             STRUCTURE UPLOADED
```

```
L6            45 S L5
L7          6574 S L5 SSS FULL
L8          9374 S L3 NOT L7

=> log hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     178.82     361.00

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:32:54 ON 10 DEC 2008

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 09:33:41 ON 10 DEC 2008
FILE 'REGISTRY' ENTERED AT 09:33:41 ON 10 DEC 2008
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     178.82     361.00

=>
Uploading C:\Program Files\STNEXP\Queries\10524048not1.str
```

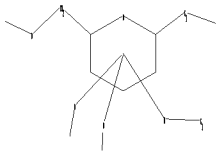

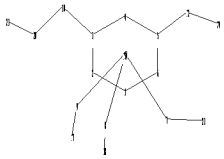

chain nodes :
7 8 9 10 12 17 18 20 21 23 24
ring nodes :
1 2 3 4 5 6
chain bonds :
3-10 5-12 7-23 8-18 9-17 10-20 12-24 20-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-12 7-23 8-18 9-17 12-24 20-21
exact bonds :
3-10 10-20

G1:O,S

G2:C,H

G3:C,S,P

```
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS  10:CLASS
12:CLASS  13:CLASS  14:CLASS  15:CLASS  17:CLASS  18:CLASS  20:CLASS  21:CLASS
23:CLASS  24:CLASS




L9      STRUCTURE UPLOADED

=> s l9
SAMPLE SEARCH INITIATED 09:34:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     9642 TO ITERATE

 20.7% PROCESSED     2000 ITERATIONS                                50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       186954 TO   198726
PROJECTED ANSWERS:            4414 TO     6384

L10          50 SEA SSS SAM L9

=> s l9 sss full
FULL SEARCH INITIATED 09:34:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   193254 TO ITERATE

100.0% PROCESSED   193254 ITERATIONS                             5859 ANSWERS
SEARCH TIME: 00.00.01

L11        5859 SEA SSS FUL L9

=> d his

     (FILE 'HOME' ENTERED AT 09:29:04 ON 10 DEC 2008)

     FILE 'REGISTRY' ENTERED AT 09:29:25 ON 10 DEC 2008
L1             STRUCTURE UPLOADED
L2           50 S L1
L3        15948 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 09:30:58 ON 10 DEC 2008
L4         6873 S L3

     FILE 'REGISTRY' ENTERED AT 09:31:10 ON 10 DEC 2008
L5             STRUCTURE UPLOADED
L6           45 S L5
L7         6574 S L5 SSS FULL
L8         9374 S L3 NOT L7
L9             STRUCTURE UPLOADED
L10          50 S L9
L11        5859 S L9 SSS FULL

=> s l8 not l11
L12       3518 L8 NOT L11

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
```

```
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                  357.18     539.36

FILE 'HCAPLUS' ENTERED AT 09:34:25 ON 10 DEC 2008
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FILE COVERS 1907 - 10 Dec 2008  VOL 149 ISS 24
FILE LAST UPDATED: 9 Dec 2008  (20081209/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s l12
L13       1452 L12

=> s l13/prep
FIELD CODES CANNOT BE CHANGED HERE
You may have tried to apply a field code to a term that already has a
field code.  You can only add a field code to a term that has no field
code appended to it.

=> s l12/prep
          1452 L12
       4682994 PREP/RL
L14       1009 L12/PREP
                 (L12 (L) PREP/RL)

=> file registry
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   2.69     542.05

FILE 'REGISTRY' ENTERED AT 09:34:50 ON 10 DEC 2008
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provided by InfoChem.

STRUCTURE FILE UPDATES:    8 DEC 2008  HIGHEST RN 1082116-14-0
DICTIONARY FILE UPDATES:   8 DEC 2008  HIGHEST RN 1082116-14-0
```

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d his

     (FILE 'HOME' ENTERED AT 09:29:04 ON 10 DEC 2008)

     FILE 'REGISTRY' ENTERED AT 09:29:25 ON 10 DEC 2008
L1   STRUCTURE UPLOADED
L2   50 S L1
L3   15948 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 09:30:58 ON 10 DEC 2008
L4   6873 S L3

     FILE 'REGISTRY' ENTERED AT 09:31:10 ON 10 DEC 2008
L5   STRUCTURE UPLOADED
L6   45 S L5
L7   6574 S L5 SSS FULL
L8   9374 S L3 NOT L7
L9   STRUCTURE UPLOADED
L10   50 S L9
L11   5859 S L9 SSS FULL
L12   3518 S L8 NOT L11

     FILE 'HCAPLUS' ENTERED AT 09:34:25 ON 10 DEC 2008
L13   1452 S L12
L14   1009 S L12/PREP

     FILE 'REGISTRY' ENTERED AT 09:34:50 ON 10 DEC 2008

=> log hold
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                     ENTRY   SESSION
FULL ESTIMATED COST   0.46   542.51

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:34:56 ON 10 DEC 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

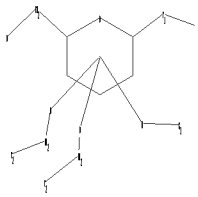
LOGINID:SSPTAEXO1623

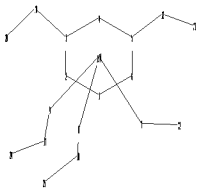
PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *

SESSION RESUMED IN FILE 'REGISTRY' AT 09:38:09 ON 10 DEC 2008
FILE 'REGISTRY' ENTERED AT 09:38:09 ON 10 DEC 2008

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	542.51

=>
Uploading C:\Program Files\STNEXP\Queries\10524048not3.str





chain nodes :
7 8 9 10 12 17 18 20 22 23 24 25
ring nodes :
1 2 3 4 5 6
chain bonds :
3-10 5-12 7-22 8-18 9-17 10-20 12-23 17-24 18-25
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-12 7-22 12-23 17-24 18-25

exact bonds :
3-10 8-18 9-17 10-20

G1:O,S

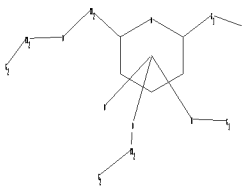
G2:H,Ph

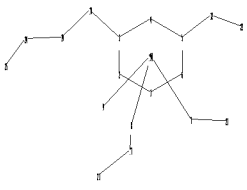
G3:C,S,P

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 20:CLASS 22:CLASS
23:CLASS 24:CLASS
25:CLASS

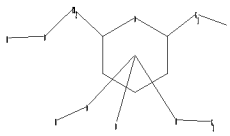
L15   STRUCTURE UPLOADED

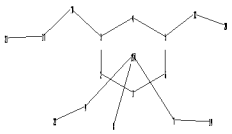
=>
Uploading C:\Program Files\STNEXP\Queries\10524048not4.str





```
chain nodes :
7  8  9  10  12  17  19  21  22  23  24  25
ring nodes :
1  2  3  4  5  6
chain bonds :
3-10  5-12  7-21  8-17  10-19  12-22  17-23  19-24  24-25
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
1-2  1-6  2-3  3-4  4-5  5-6  5-12  7-21  12-22  17-23  24-25
exact bonds :
3-10  8-17  10-19  19-24


G1:O,S

G2:H,Ph

G3:C,S,P

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS  10:CLASS
12:CLASS  13:CLASS  14:CLASS  15:CLASS  17:CLASS  19:CLASS  21:CLASS  22:CLASS
23:CLASS  24:CLASS
25:CLASS



L16     STRUCTURE UPLOADED

=>
Uploading C:\Program Files\STNEXP\Queries\10524048not5.str
```





chain nodes :
7 8 9 10 12 17 19 20 21 22
ring nodes :
1 2 3 4 5 6
chain bonds :
3-10 5-12 7-19 9-22 10-17 12-20 17-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-12 7-19 12-20
exact bonds :
3-10 9-22 10-17 17-21

G1:O,S

G2:H,Ph

G3:C,S,P

Match level :

```
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS  10:CLASS
12:CLASS  13:CLASS  14:CLASS  15:CLASS  17:CLASS  19:CLASS  20:CLASS  21:CLASS
22:CLASS



L17     STRUCTURE UPLOADED

=> d his

     (FILE 'HOME' ENTERED AT 09:29:04 ON 10 DEC 2008)

     FILE 'REGISTRY' ENTERED AT 09:29:25 ON 10 DEC 2008
L1              STRUCTURE UPLOADED
L2           50 S L1
L3        15948 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 09:30:58 ON 10 DEC 2008
L4         6873 S L3

     FILE 'REGISTRY' ENTERED AT 09:31:10 ON 10 DEC 2008
L5              STRUCTURE UPLOADED
L6           45 S L5
L7         6574 S L5 SSS FULL
L8         9374 S L3 NOT L7
L9              STRUCTURE UPLOADED
L10          50 S L9
L11        5859 S L9 SSS FULL
L12        3518 S L8 NOT L11

     FILE 'HCAPLUS' ENTERED AT 09:34:25 ON 10 DEC 2008
L13        1452 S L12
L14        1009 S L12/PREP

     FILE 'REGISTRY' ENTERED AT 09:34:50 ON 10 DEC 2008
L15             STRUCTURE UPLOADED
L16             STRUCTURE UPLOADED
L17             STRUCTURE UPLOADED

=> s l15 sub=l12
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 09:39:25 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -     3518 TO ITERATE

100.0% PROCESSED     3518 ITERATIONS                           135 ANSWERS
SEARCH TIME: 00.00.01

L18         135 SEA SUB=L12 SSS FUL L15

=> s l16 sub=l12
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 09:39:33 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -     2886 TO ITERATE

100.0% PROCESSED     2886 ITERATIONS                           818 ANSWERS
SEARCH TIME: 00.00.01

L19         818 SEA SUB=L12 SSS FUL L16

=> s l17 sub=l12
```

```
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 09:39:43 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -     3518 TO ITERATE

100.0% PROCESSED     3518 ITERATIONS                          1352 ANSWERS
SEARCH TIME: 00.00.01

L20        1352 SEA SUB=L12 SSS FUL L17

=> s l12 not l18
L21        3383 L12 NOT L18

=> s l21 not l19
L22        2567 L21 NOT L19

=> s l22 not l20
L23        1221 L22 NOT L20

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                 128.14     670.19

FILE 'HCAPLUS' ENTERED AT 09:40:15 ON 10 DEC 2008
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FILE COVERS 1907 - 10 Dec 2008  VOL 149 ISS 24
FILE LAST UPDATED: 9 Dec 2008  (20081209/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s l23
L24        740 L23

=> s l23/prep
           740 L23
       4682994 PREP/RL
L25        561 L23/PREP
                (L23 (L) PREP/RL)

=> file stnguide
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
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                                                      ENTRY    SESSION
FULL ESTIMATED COST                                    2.69     672.88

FILE 'STNGUIDE' ENTERED AT 09:40:30 ON 10 DEC 2008
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec  5, 2008 (20081205/UP).

=> file registry
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    0.54     673.42

FILE 'REGISTRY' ENTERED AT 09:45:51 ON 10 DEC 2008
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    8 DEC 2008  HIGHEST RN 1082116-14-0
DICTIONARY FILE UPDATES:   8 DEC 2008  HIGHEST RN 1082116-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\STNEXP\Queries\10524048narrow.str
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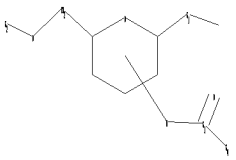
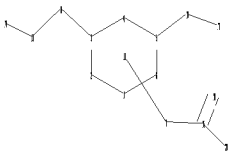




chain nodes :
7 8 10 13 14 16 17 18 20
ring nodes :
1 2 3 4 5 6
chain bonds :
3-8 5-10 7-16 8-13 10-17 13-14 16-18 16-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-10 7-16 10-17 13-14 16-18 16-20
exact bonds :
3-8 8-13

G1:O,S

G2:C,H

G3:C,S,P

G4:C,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS 11:CLASS
13:CLASS 14:CLASS 16:CLASS 17:CLASS 18:CLASS 20:CLASS

L26   STRUCTURE UPLOADED

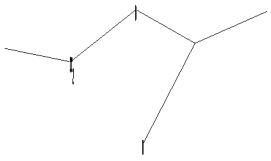
=> s l26 sub-l23
COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains both search terms created by
structure-building or screen commands and text search terms. L#s
created via the STRUCTURE or SCREEN commands must be searched in the
structures files separately from text terms or profiles. The L#
answer sets from structure searches can be used in crossover searches
and can be combined with text terms.

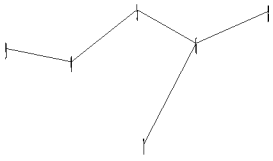
=> s l26 sub=l23
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 09:46:20 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -   1201 TO ITERATE

100.0% PROCESSED   1201 ITERATIONS   1024 ANSWERS
SEARCH TIME: 00.00.01

L27   1024 SEA SUB=L23 SSS FUL L26

=>
Uploading C:\Program Files\STNEXP\Queries\10524048groupy.str





chain nodes :
4 5 6 7 8 9
chain bonds :
4-5 4-9 5-6 6-7 6-8
exact/norm bonds :
5-6
exact bonds :
4-5 4-9 6-7 6-8

G1:O,S

G2:H,Ph

G3:C,S,P

Match level :
4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L28   STRUCTURE UPLOADED

=> s l28 sub=l27
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 09:46:51 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 909 TO ITERATE

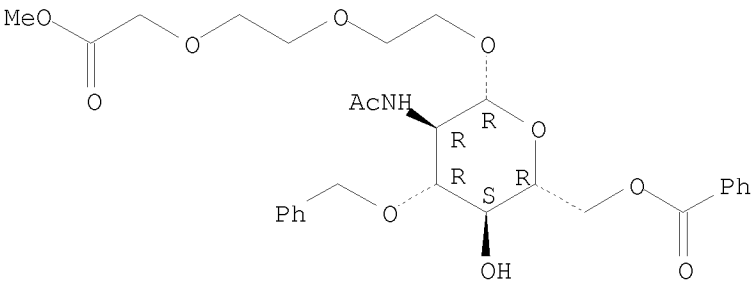
100.0% PROCESSED 909 ITERATIONS 12 ANSWERS
SEARCH TIME: 00.00.01

L29 12 SEA SUB=L27 SSS FUL L28

=> d l29 scan

L29 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Acetic acid, [2-[2-[[2-(acetylamino)-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-β-D-glucopyranosyl]oxy]ethoxy]ethoxy]-, methyl ester (9CI)
MF C29 H37 N O11

Absolute stereochemistry.

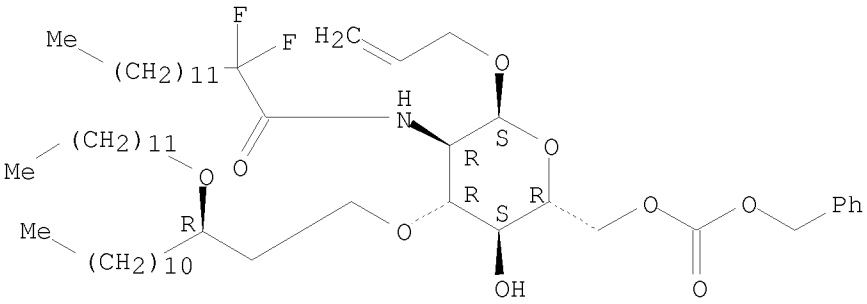


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L29 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN α-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[(2,2-difluoro-1-oxotetradecyl)amino]-3-O-[(3R)-3-(dodecyloxy)tetradecyl]-, 6-(phenylmethyl carbonate) (9CI)
MF C57 H99 F2 N O9

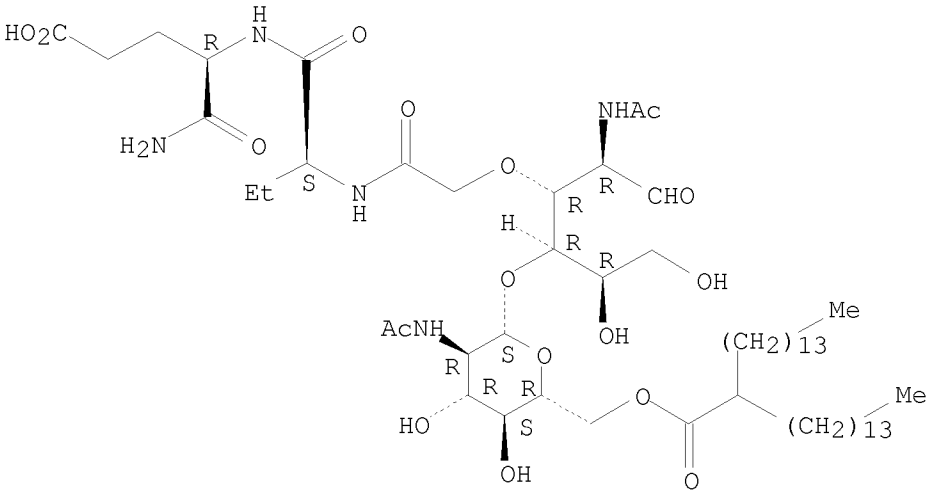
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L29 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxo-2-tetradecylhexadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI)
MF C57 H103 N5 O17

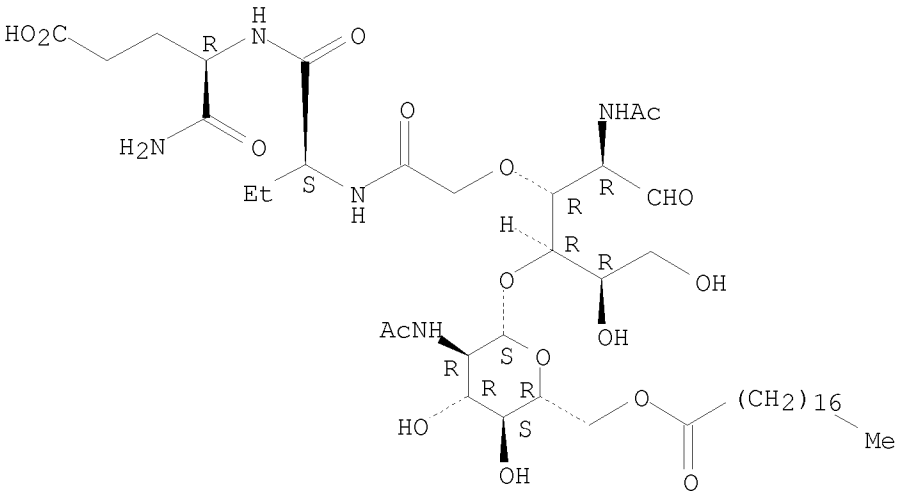
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L29 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxooctadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI)
MF C45 H79 N5 O17

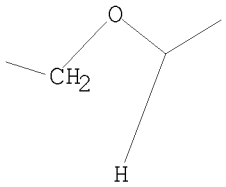
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d l28
L28 HAS NO ANSWERS
L28 STR



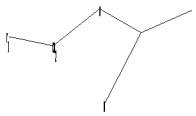
G1 O,S

G2 H,Ph

G3 C,S,P

Structure attributes must be viewed using STN Express query preparation.

=>
Uploading C:\Program Files\STNEXP\Queries\10524048groupy2.str



chain nodes :
1 2 3 4 5 6
chain bonds :
1-2 1-6 2-3 3-4 3-5
exact/norm bonds :
1-6 2-3
exact bonds :
1-2 3-4 3-5

G1:C,H

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS

L30 STRUCTURE UPLOADED

=> s l30 sub=l27
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 09:48:54 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 1024 TO ITERATE

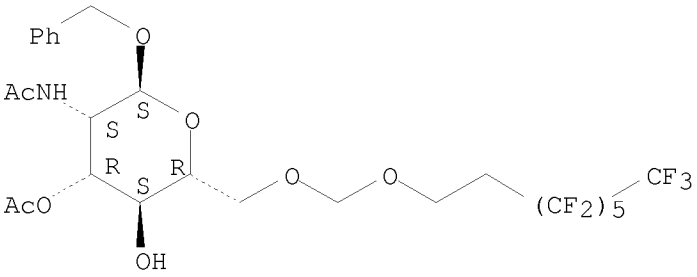
100.0% PROCESSED 1024 ITERATIONS 110 ANSWERS
SEARCH TIME: 00.00.01

L31 110 SEA SUB=L27 SSS FUL L30

=> d l31 scan

L31 110 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN α-D-Mannopyranoside, phenylmethyl
2-(acetylamino)-2-deoxy-6-O-[[(3,3,4,4,5,5,6,6,7,7,8,8,8-
tridecafluorooctyl)oxy]methyl]-, 3-acetate
MF C26 H28 F13 N O8

Absolute stereochemistry.

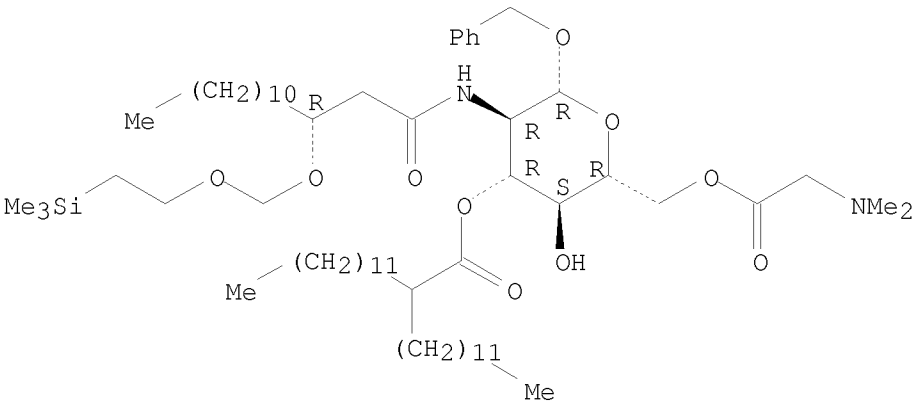


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L31 110 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Glycine, N,N-dimethyl-, 6-ester with phenylmethyl
2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-
β-D-glucopyranoside 3-(2-dodecyltetradecanoate), (R)- (9CI)
MF C63 H116 N2 O10 Si

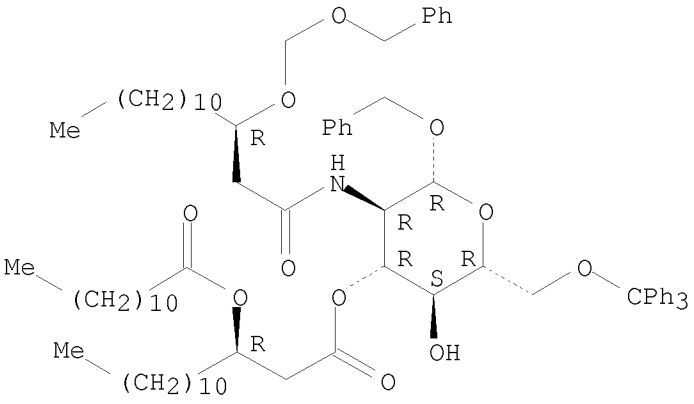
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L31 110 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN β-D-Glucopyranoside, phenylmethyl
2-deoxy-2-[[1-oxo-3-[(phenylmethoxy)methoxy]tetradecyl]amino]-6-O-
(triphenylmethyl)-, 3-[3-[(1-oxododecyl)oxy]tetradecanoate], [2(R),3(R)]-
(9CI)
MF C80 H115 N O11

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	129.06	802.48

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FILE COVERS 1907 - 10 Dec 2008 VOL 149 ISS 24
FILE LAST UPDATED: 9 Dec 2008 (20081209/ED)

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 substance identification.

=> s l31
L32   52 L31

=> s l32 and (PY<2003 or AY<2003 or PRY<2003)
      22961967 PY<2003
       4500767 AY<2003
       3969216 PRY<2003
L33   42 L32 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l33 1-42 ti abs bi bhitstr
'BI' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'
'BHITSTR' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and

```
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):ti abs bib hitstr

L33  ANSWER 1 OF 42  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of glycosides of N-acetyl-6-O-[2,2-bis(hydroxymethyl)-3-
     hydroxypropyl]-D-glucosamine for use in the treatment of brain tumors
AB   The invention describes the preparation of title glycosides (aglycon R1 =
     C8-C16 alkyl) from N-acetyl-D-glucosamine.  The procedure involves
     glycosidation (e.g., with octanol), reaction of the 4,5-dibenzyl-protected
     derivative with 9-(4-methoxyphenyl)-2,4,8,10-tetraoxa-3-thiaspiro[5.5]undecane
     3,3-dioxide (prepared from pentaerythritol, anisaldehyde, and
     1,1'-sulfonyldiimidazole), and deprotection.  Octyl
     2-acetamido-6-O-[2,2-bis(hydroxymethyl)-3-hydroxypropyl]-α-D-
     glucosamine showed IC50 = 43 ± 14 μM for inhibition of human glioma
     cultures.
AN   2001:780924  HCAPLUS <<LOGINID::20081210>>
DN   135:331634
TI   Preparation of glycosides of N-acetyl-6-O-[2,2-bis(hydroxymethyl)-3-
     hydroxypropyl]-D-glucosamine for use in the treatment of brain tumors
IN   Bernabe Pajares, Manuel; Fernandez-Mayoralas, Alvarez Alfonso; Nieto
     Sampedro, Manuel; Vaquero Crespo, Jesus; Zurita Castillo, Mercedes
PA   Consejo Superior De Investigaciones Cientificas, Spain; Hospital
     Universitario Clinica Puerta De Hierro
SO   PCT Int. Appl., 18 pp.
     CODEN: PIXXD2
DT   Patent
LA   Spanish
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2001079243        A1    20011025    WO 2001-ES138           20010406 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     ES 2164013           A1    20020201    ES 2000-982             20000414 <--
     ES 2164013           B1    20030616
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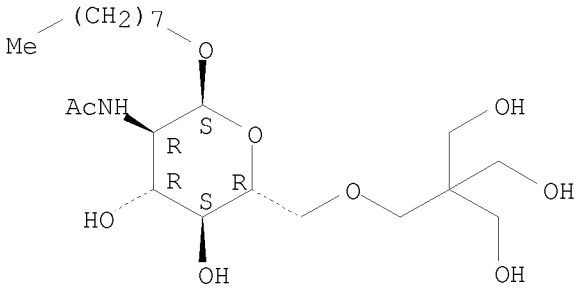
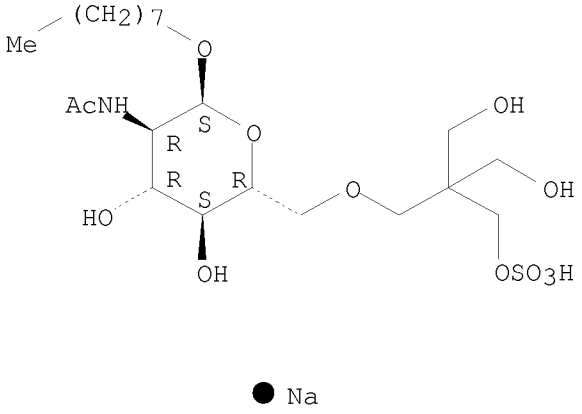
PRAI ES 2000-982 A 20000414 <--
OS CASREACT 135:331634; MARPAT 135:331634
IT 368870-53-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of glycosides of acetyl[bis(hydroxymethyl)hydroxypropyl]-D-glucosamine for treatment of brain tumors)
RN 368870-53-5 HCAPLUS
CN α-D-Glucopyranoside, octyl 2-(acetylamino)-2-deoxy-6-O-[3-hydroxy-2,2-bis(hydroxymethyl)propyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 368870-57-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of glycosides of acetyl[bis(hydroxymethyl)hydroxypropyl]-D-glucosamine for treatment of brain tumors)
RN 368870-57-9 HCAPLUS
CN α-D-Glucopyranoside, octyl 2-(acetylamino)-6-O-[2,2-bis(hydroxymethyl)-3-(sulfooxy)propyl]-2-deoxy-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

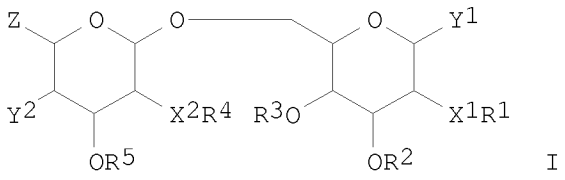


RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of oligosaccharide lipid-A analogs as antitumor and immunostimulating agents

GI



I

AB New synthetic sugar Lipid-A analogs I wherein at least one of R1-R5 is selected from RCONHCH[R'NHCO]CH2CO-, RCH[X](CH2)mAOCHR'(CH2)nB-, RAOCHR'(CH2)mBOCHR"(CH2)nL-, where the remaining R1-R5 AR IDP H, R, COR, RCONHCH[R'NHCO]CH2CO-, RCH[X](CH2)mAOCHR'(CH2)nB-, RAOCHR'(CH2)mBOCHR"(CH2)nL-, RCH(X)(CH2)mA-, RAOCHR'(CH2)mB-, were each R, R', R" is independently H, alkyl, A, B and L are independently selected from the group consisting of -CH-, -C(=O)- and -C(=S) groups; each X is independently selected from the group consisting of -OH, -SH, -NH, and-halogen; m and n are independently selected from the range of integers between 0 and 10 inclusive, Xl and X are -O- or -NH-, Y1 and Y2 are independently selected from the group consisting of -OH, -OP(O)(OH), -COOH, -OSOH, -CH(COOH) and -OP(O)(OH)(OCHCHNH), Z is H, -CHE, or -CHMG, where E is hydrogen, halogen, OH, NH, OSOH, SOH, P(O)(OH) or OP(O)(OH); M is -O-, -S-, -OC(=O), -SC(=O), -OC=(S)-, or.-NHC(=O); G is -hydrogen, or a substituted or unsubstituted, branched or linear, saturated or unsatd. C-2 aliphatic hydrocarbon. or a physiol. acceptable salt thereof. Liposome formulations containing totally synthetic components such as synthetic Lipid-A and synthetic lipopeptide derived from tumor-associated MUC1 mucin are described along with their therapeutic utility. Comparative test results of immunostimulating properties and toxicity of Lipid-A analogs are included. Thus, 2-deoxy-4-O-phosphono-2-[(3S)-3-tetradecanamido-4-nonylamino-4-oxo-butanamido]-3-O-tetradecanoyl-D-glucopyranose was prepared and tested in mice as antitumor and immunostimulating agent (CPM = m22).

AN 2001:380597 HCAPLUS <<LOGINID::20081210>>
DN 134:367137
TI Preparation of oligosaccharide lipid-A analogs as antitumor and immunostimulating agents
IN Jiang, Zi-Hua; Bach, Mimi; Yalamati, Damayanthi; Koganty, Rao; Longenecker, Michael
PA Biomira, Inc., Can.
SO PCT Int. Appl., 155 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001036433	A2	20010525	WO 2000-US31281	20001115 <--
WO 2001036433	A3	20020510		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2396744 A1 20010525 CA 2000-2396744 20001115 <--

AU 2001017647 A 20010530 AU 2001-17647 20001115 <--

AU 780577 B2 20050407

EP 1232168 A2 20020821 EP 2000-980380 20001115 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003514824 T 20030422 JP 2001-538922 20001115 <--

PRAI US 1999-164928P P 19991115 <--

WO 2000-US31281 W 20001115 <--

OS MARPAT 134:367137

IT 339317-13-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

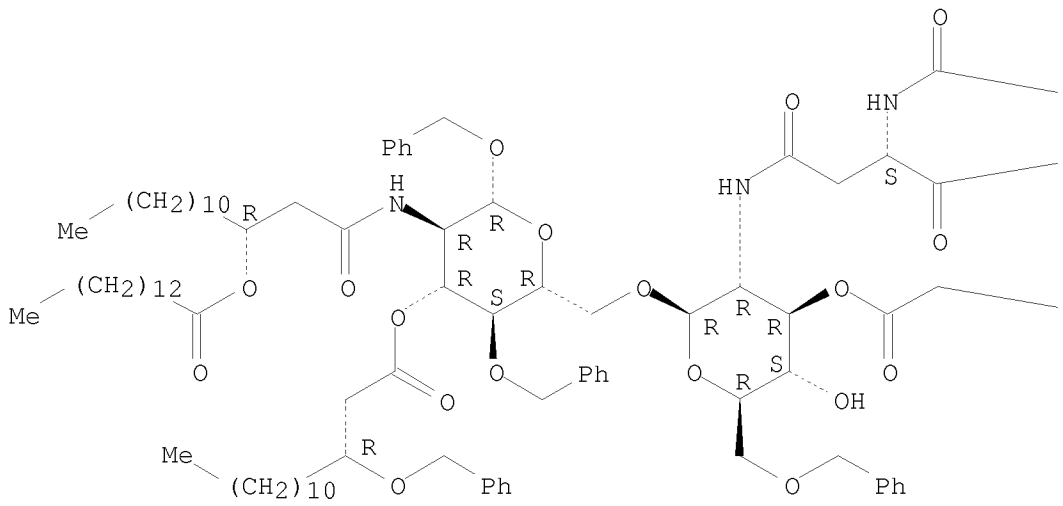
(preparation of oligosaccharide lipid A analogs as antitumor and immunostimulating agents)

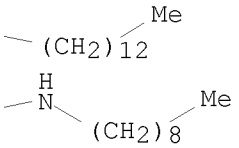
RN 339317-13-4 HCAPLUS

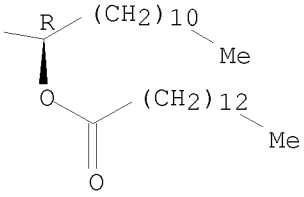
CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-6-O-[2-deoxy-2-[[(3S)-4-(nonylamino)-1,4-dioxo-3-[(1-oxotetradecyl)amino]butyl]amino]-3-O-[(3R)-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]-6-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[(3R)-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-4-O-(phenylmethyl)-, 3-[(3R)-3-(phenylmethoxy)tetradecanoate] (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

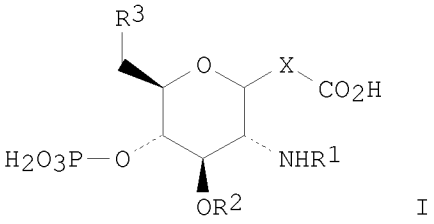
PAGE 1-A







L33 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of ether-type lipid GLA-60 analogues inhibiting the activation of macrophage
GI



I

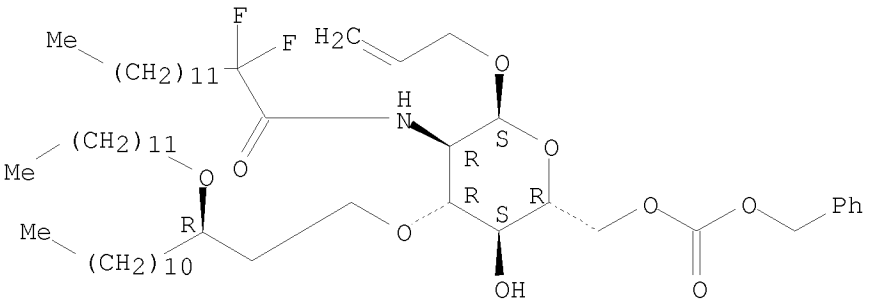
AB The title compds. (I), esters of the same, or pharmacol. acceptable salts thereof, [wherein R1 is (un)substituted C1-20 alkanoyl, C3-20 alkenoyl, or C3-20 alkynoyl; R2 is C1-20 alkyl, C2-20 alkenyl, or C2-20 alkynyl; R3 is halogeno, hydroxyl, C1-6 alkoxy, C2-6 alkenyloxy, or C2-6 alkynyloxy; and X is a single bond or OCH2] are prepared These compds., esters and salts exhibit an excellent macrophage-depressant effect and are useful as anti-inflammatory, antiautoimmune or antisepticemic agents. Thus, 2,6-anhydro-3-deoxy-3-(2,2-difluorotetradecanamido)-5-O-diphenylphosphono-4-O-[(R)-3-(dodecyloxy)tetradecyl]-7-O-methyl-D-glycero-D-ido-heptonic acid in THF was hydrogenolyzed over platinum oxide under hydrogen atmospheric at
room temperature for 18 h to give 2,6-anhydro-3-deoxy-3-(2,2-difluorotetradecanamido)-5-O-phosphono-4-O-[(R)-3-(dodecyloxy)tetradecyl]-7-O-methyl-D-glycero-D-ido-heptonic acid, which showed IC50 of 1.5 nM for inhibiting the lipopolysaccharide (LPS)-stimulated production of TNFα in TPA-treated human monocyte U937 cells.
AN 2001:338537 HCAPLUS <<LOGINID::20081210>>
DN 134:353476
TI Preparation of ether-type lipid GLA-60 analogues inhibiting the activation

of macrophage
IN Watanabe, Yukiko; Miura, Kumiko; Nakamura, Tsuyoshi; Shiozaki, Masao
PA Sankyo Co., Ltd., Japan
SO PCT Int. Appl., 197 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001032667	A1	20010510	WO 2000-JP7759	20001102 <--
	W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	JP 2001270895	A	20011002	JP 2000-335543	20001102 <--
PRAI	JP 1999-314133	A	19991104	<--	
	JP 2000-4254	A	20000113	<--	

OS MARPAT 134:353476
IT 338951-92-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of ether-type lipid GLA-60 analogs inhibiting activation of macrophage as anti-inflammatory, antiautoimmune, or antisepticemic agents)
RN 338951-92-1 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[(2,2-difluoro-1-oxotetradecyl)amino]-3-O-[(3R)-3-(dodecyloxy)tetradecyl]-, 6-(phenylmethyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

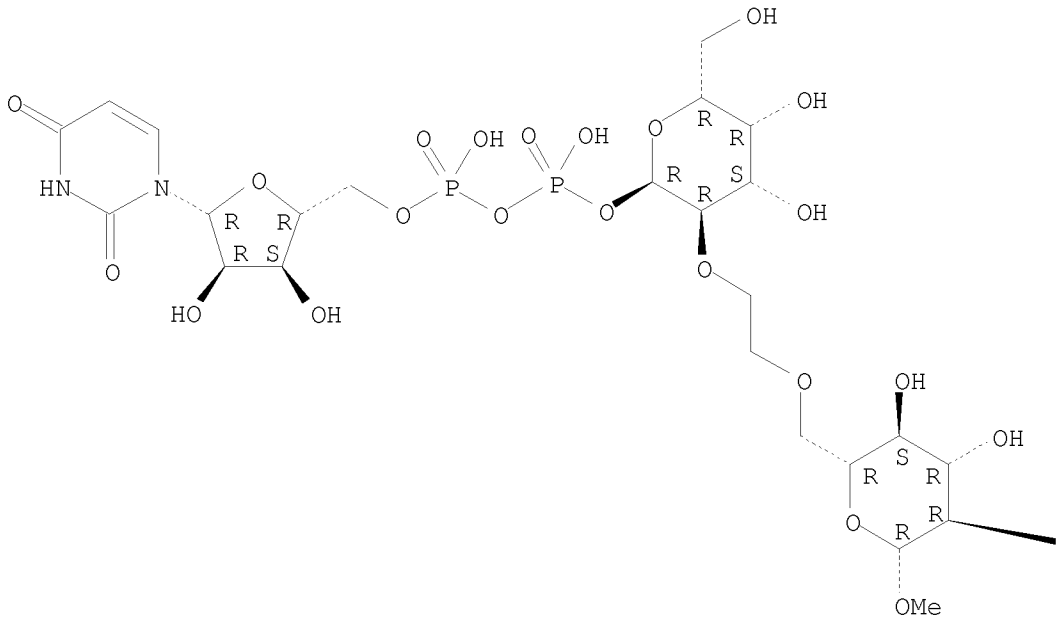
L33 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Approach to transition state analog of glycosyltransferase reaction. Design and synthesis of selective inhibitor of β-1,4-galactosyltransferase
AB A review with 23 refs. In order to create specific inhibitors against glycosyltransferases, tethering glycosyl donor to acceptor was planned. Mono-O-methylated UDP-Gal and related analogs were synthesized, and their behaviors toward β-1,4-galactosyltransferase were examined The allowance for the O-methylation of Gal moiety was decreased in the following order: 2-, 3-, 4-, and 6-positions and it was suggested that the modification at the 2-position does not affect the affinity but retards the reaction rate by preventing the conformational change to the

transition state, which develops so-called dynamic binding. Modification of the glycosyl acceptor (GlcNAc) moiety showed the tethering probability in the 3'- and 6'-positions. Bisubstrate tricomponent analogs linked through 2,6'-methylene and 2,6'-ethylene groups were synthesized and found to be potent inhibitors against bovine GlcNAc:β-1,4-galactosyltransferase, with Ki values of 1.35 and 1.95 μM, resp., for the acceptor.

AN 1997:264954 HCAPLUS <<LOGINID::20081210>>
DN 127:5238
OREF 127:1193a,1196a
TI Approach to transition state analog of glycosyltransferase reaction. Design and synthesis of selective inhibitor of β-1,4-galactosyltransferase
AU Hashimoto, Hironobu; Kajihara, Yasuhiro
CS Dep. Life Sci., Tokyo Inst. Technol., Yokohama, 226, Japan
SO Yuki Gosei Kagaku Kyokaishi (1997), 55(4), 325-333
CODEN: YGKKAE; ISSN: 0037-9980
PB Yuki Gosei Kagaku Kyokai
DT Journal; General Review
LA Japanese
IT 190248-89-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(design and preparation of selective inhibitor of β-1,4-galactosyltransferase)
RN 190248-89-6 HCAPLUS
CN Uridine 5'-(trihydrogen diphosphate), P'-[2-O-[2-[2-(acetylamino)-2-deoxy-1-O-methyl-β-D-glucopyranos-6-O-yl]ethyl]-α-D-galactopyranosyl] ester (9CI) (CA INDEX NAME)

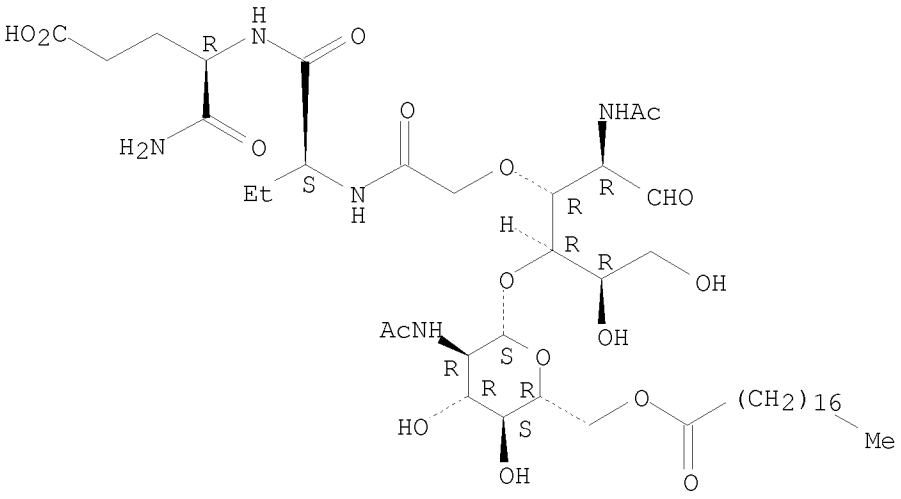
Absolute stereochemistry.

PAGE 1-A



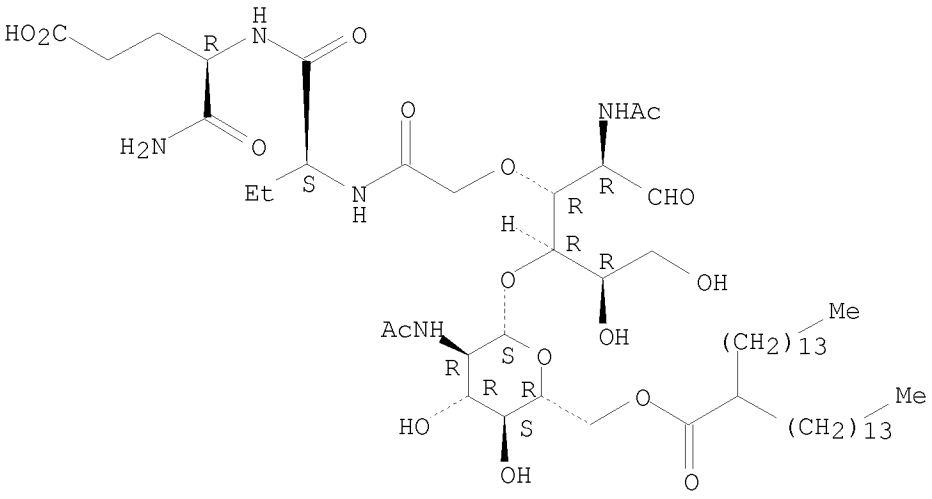
L33 ANSWER 5 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunomodulatory and radioprotective activities of synthetic analogs of the disaccharide-dipeptide subunit of peptidoglycan
AB Glycopeptides derived from bacterial cell wall peptidoglycans possess marked immunostimulatory properties. The min. adjuvant-active structure of peptidoglycan is MDP, however, some compds. with a prolonged sugar chain derived from the basal repeating disaccharide-dipeptide unit (GMDP) are more potent and less toxic. Here, the authors present several biol. activities of a totally synthetic GMDP analog modified both in the sugar and in the peptide part, and its lipophilic derivs.
AN 1996:639657 HCAPLUS <<LOGINID::20081210>>
DN 126:139608
OREF 126:26823a,26826a
TI Immunomodulatory and radioprotective activities of synthetic analogs of the disaccharide-dipeptide subunit of peptidoglycan
AU Hribalova, V.; Vacek, A.; Toman, M.; Horavova, P.; Ledvina, M.; Jezek, J.
CS National Institute Public Health, Prague, CZ-100 42, Czech Rep.
SO Peptides 1994, Proceedings of the European Peptide Symposium, 23rd, Braga, Port., Sept. 4-10, 1994 (1995), Meeting Date 1994, 847-848. Editor(s): Maia, Hernani L. S. Publisher: ESCOM, Leiden, Neth. CODEN: 63MBAO
DT Conference
LA English
IT 155780-14-6
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (immunostimulatory and radioprotective activities of muramyl dipeptide analogs)
RN 155780-14-6 HCAPLUS
CN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxooctadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 155780-15-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(immunostimulatory and radioprotective activities of muramyl dipeptide analogs)
RN 155780-15-7 HCAPLUS
CN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxo-2-tetradecylhexadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

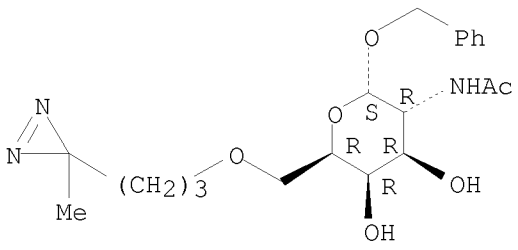


L33 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis of O-glycan core 3: characterization of UDP-GlcNAc:GalNAc-R β3-N-acetyl-glucosaminyltransferase activity from colonic mucosal tissues and lack of the activity in human cancer cell lines
AB UDP-GlcNAc:GalNAc-R β3-GlcNAc-transferase (core 3 β3-GlcNAc-T, where GlcNAc is N-acetyl-D-glucosamine, GalNAc is N-acetyl-D-galactosamine and T is transferase) is expressed in a tissue-specific fashion and is high in normal colonic tissue, but down regulated in colon cancer. To

further study the control of this enzyme, we examined the activity in pig, rat and human colonic tissues, and several human cancer cell lines. The enzyme was difficult to solubilize by detergents and was extremely unstable in the solubilized form. Using synthetic derivs. of the GalNAc-R substrate, we showed that the specificity of the enzyme in normal rat and human colonic mucosa requires all the substituents of the GalNAc-sugar ring of substrates for maximal activity. Core 3 β3-GlcNAc-T was significantly influenced by the structure of the aglycon group. None of the inactive substrate derivs. could inhibit the activity. N-iodoacetamido-galactosamineα-benzyl was a weak substrate and significantly inhibited the incorporation of GlcNAc into Gal-NAcα-benzyl by human colonic homogenates. Surprisingly, none of the colonic cancer cell lines or any other cancer and leukemia cells examined exhibited detectable activity of the enzyme, although a number of other glycosyltransferase activities involved in O-glycan biosynthesis were active. Mixing expts. did not reveal an endogenous inhibitor in HL60 cells or an activator of core 3 β3-GlcNAc-T in human colonic mucosa. Thus, the lack of core 3 β3-GlcNAc-T activity in cancer cell lines may be due to cell transformation or cell culturing.

AN 1995:592627 HCAPLUS <<LOGINID::20081210>>
DN 123:163928
OREF 123:29091a,29094a
TI Synthesis of O-glycan core 3: characterization of UDP-GlcNAc:GalNAc-R β3-N-acetyl-glucosaminyltransferase activity from colonic mucosal tissues and lack of the activity in human cancer cell lines
AU Vavasseur, Fabienne; Yang, Ji-Mao; Dole, Kiran; Paulsen, Hans; Brockhausen, Inka
CS Dep. Biochemistry, Hospital Sick Children, Toronto, ON, Can.
SO Glycobiology (1995), 5(3), 351-7
CODEN: GLYCE3; ISSN: 0959-6658
PB Oxford University Press
DT Journal
LA English
IT 141019-97-8 142925-54-0 166907-10-4
166907-11-5
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(substrate; substrate specificity of UDP-GlcNAc:GalNAc-R β3-N-acetyl-glucosaminyltransferase from colonic mucosa and lack of activity in human cancer cell lines)
RN 141019-97-8 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-[3-(3-methyl-3H-diazirin-3-yl)propyl]- (CA INDEX NAME)

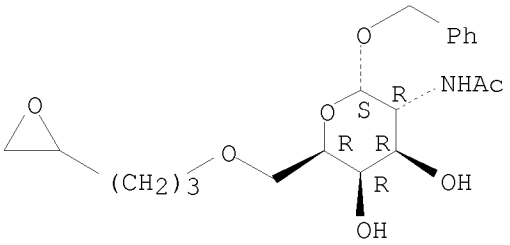
Absolute stereochemistry.



RN 142925-54-0 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl

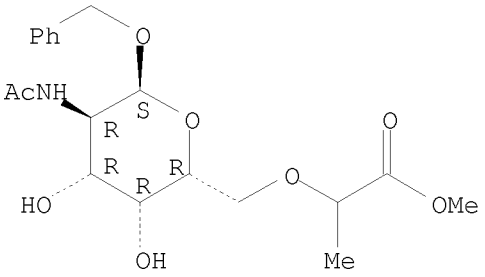
2-(acetylamino)-2-deoxy-6-O-(3-oxiranylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



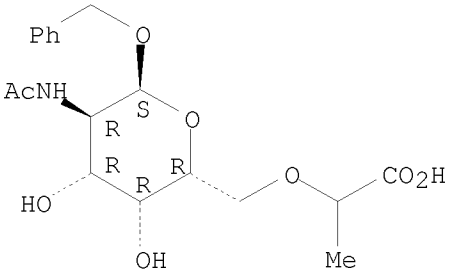
RN 166907-10-4 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl
2-(acetylamino)-2-deoxy-6-O-(2-methoxy-1-methyl-2-oxoethyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 166907-11-5 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl
2-(acetylamino)-6-O-(1-carboxyethyl)-2-deoxy- (CA INDEX NAME)

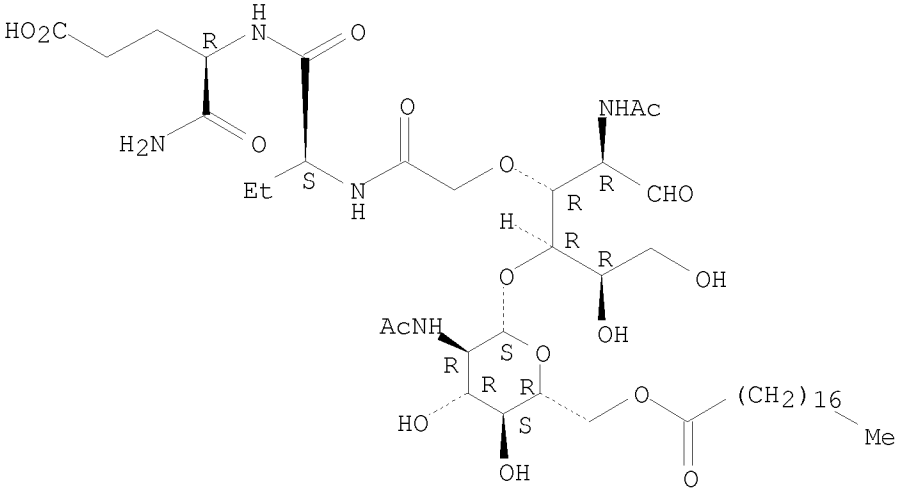
Absolute stereochemistry.



L33 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Fragmentation of lipophilic disaccharide analogs of muramyl dipeptide (MDP) in FAB mass spectrometry, a characterization of lipophilic substitution
AB Fast-atom-bombardment mass spectra of disaccharide analogs of muramyl

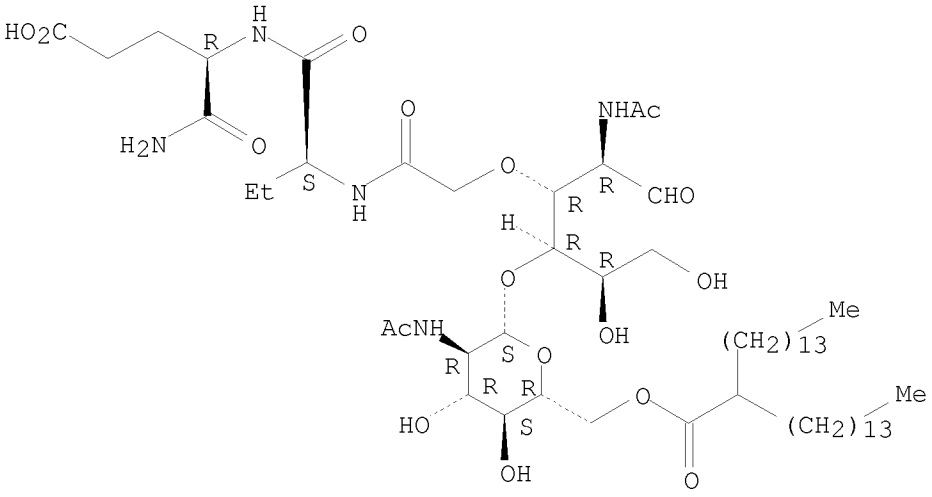
dipeptide are reported.
AN 1995:592524 HCAPLUS <<LOGINID::20081210>>
DN 123:257185
OREF 123:46015a,46018a
TI Fragmentation of lipophilic disaccharide analogs of muramyl dipeptide (MDP) in FAB mass spectrometry, a characterization of lipophilic substitution
AU Vaisar, Tomas; Ledvina, Miroslav; Jezek, Jan
CS Inst. Org. Chem. Biochem., Acad. Sci. Czech Republic, Prague, 166 10, Czech Rep.
SO Journal of Mass Spectrometry (1995), 30(5), 767-8
CODEN: JMSPFJ; ISSN: 1076-5174
PB Wiley
DT Journal
LA English
IT 155780-14-6 155780-15-7
RL: PRP (Properties)
(fragmentation of lipophilic disaccharide analogs of muramyl dipeptide using fast-atom-bombardment mass spectrometry)
RN 155780-14-6 HCAPLUS
CN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxooctadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 155780-15-7 HCAPLUS
CN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxo-2-tetradecylhexadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI) (CA INDEX NAME)

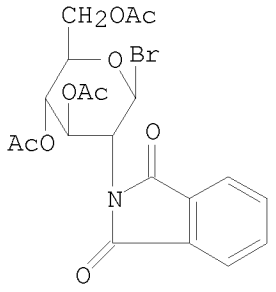
Absolute stereochemistry.



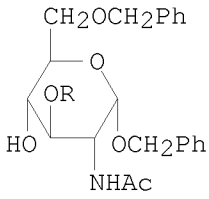
L33 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Synthesis of O-[2-acetamido-2-deoxy-6-O-stearoyl- and -6-O-(2-tetradecylhexadecanoyl)-β-D-glucopyranosyl]-(1 → 4)-N-acetylnormuramoyl-L-α-aminobutanoyl-D-isoglutamine, lipophilic disaccharide analogs of MDP

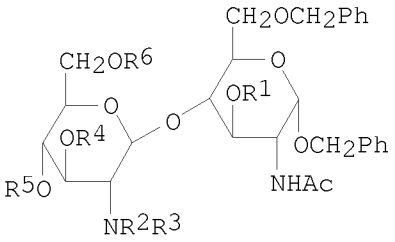
GI



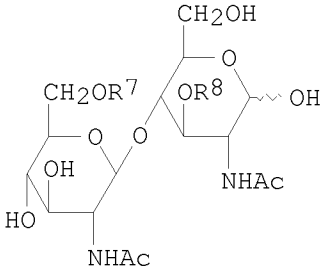
I



II



III



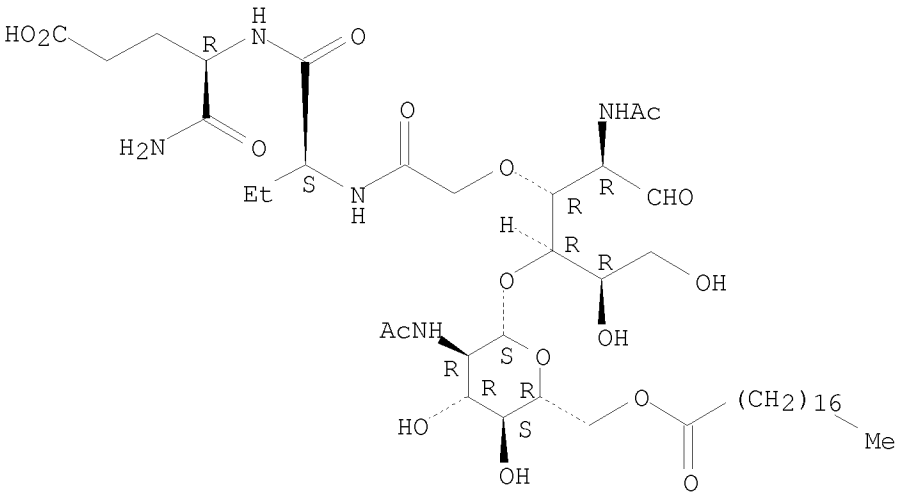
IV

AB Silver triflate-promoted condensation of 3,4,6-tri-O-acetyl-2-deoxy-2-phthalimido-β-D-glucopyranosyl bromide (I) with benzyl 2-acetamido-6-O-benzyl-2-deoxy-3-O-(methoxycarbonyl)methyl-α-D-glucopyranoside (II; R = CH2CO2Me) afforded the key compound, benzyl 2-acetamido-6-O-benzyl-2-deoxy-3-O-(methoxycarbonyl)methyl-4-O-(3,4,6-tri-O-acetyl-2-deoxy-2-phthalimido-β-D-glucopyranosyl)-α-D-glucopyranoside (II; R1 = CH2CO2Me, R2R3 = 1,2-OCC6H4CO, R4 - R6 = Ac),

which after deprotection was transformed into acid II (R1 = CH2CO2H, R2 = H, R3 = Ac, R5R6 = CMe2). Condensation of II (R1 = CH2CO2H, R2 = H, R3 = Ac, R5R6 = CMe2) with the benzyl ester of L-α-aminobutanoyl-D-isoglutamine and deisopropylidenation of the product II [R1 = CH2CO-L-Abu-D-isoGln(OCH2Ph), R2 = H, R3 = Ac, R4 = CH2OCH2Ph, R5R6 = CMe2, Abu = EtCH(NH)CO] afforded the benzyl ester of N-{2-O-[benzyl 2-acetamido-4-O-(2-acetamido-3-O-benzyloxymethyl-2-deoxy-β-D-glucopyranosyl)-6-O-benzyl-2,3-dideoxy-α-D-glucopyranosid-3-yl]glycoloyl}--α-aminobutanoyl-D-isoglutamine [II; R1 = CH2CO-L-Abu-D-isoGln(OCH2Ph), R2 = R5 = R6 = H, R3 = Ac, R4 = CH2OCH2Ph]. Partial O-acylation of II [R1 = CH2CO-L-Abu-D-isoGln(OCH2Ph), R2 = R5 = R6 = H, R3 = Ac, R4 = CH2OCH2Ph] and hydrogenolysis of protecting groups gave the 6-O-stearoyl- and 6-O-(2-tetradecylhexadecanoyl)-disaccharide-dipeptides IV [R7 = stearoyl, 2-(tetradecyl)hexadecanoyl, R8 = CH2CO-L-Abu-D-isoGln], resp. Pyrogenicity and adjuvant activity in cell-mediated immunity are reported.

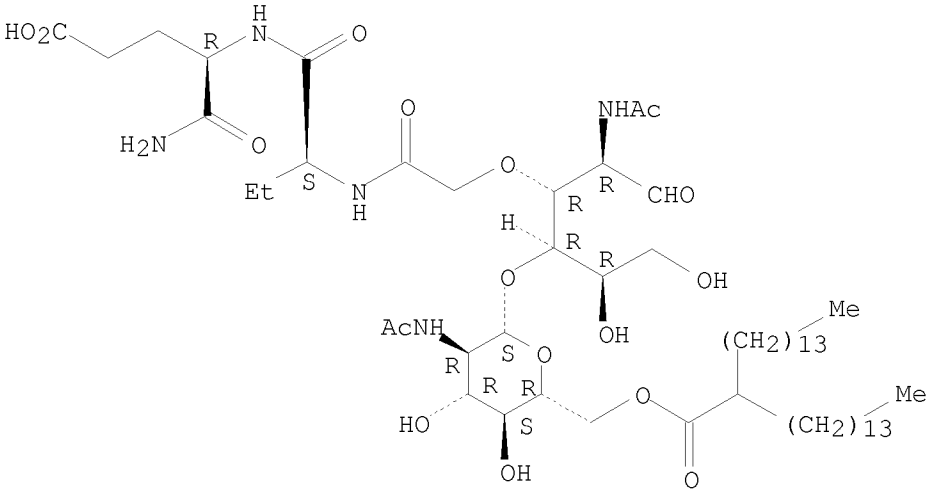
AN 1994:436053 HCAPLUS <<LOGINID::20081210>>
DN 121:36053
OREF 121:6683a,6686a
TI Synthesis of O-[2-acetamido-2-deoxy-6-O-stearoyl- and -6-O-(2-tetradecylhexadecanoyl)-β-D-glucopyranosyl]-(1 → 4)-N-acetylnormuramoyl-L-α-aminobutanoyl-D-isoglutamine, lipophilic disaccharide analogs of MDP
AU Ledvina, Miroslav; Jezek, Jan; Saman, David; Vaisar, Tomas; Hribalova, Vera
CS Inst. Org. Chem. Biochem., Czech. Acad. Sci., Prague, 166 10, Czech.
SO Carbohydrate Research (1994), 251, 269-84
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
OS CASREACT 121:36053
IT 155780-14-6P 155780-15-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, pyrogenicity and adjuvant activity of)
RN 155780-14-6 HCAPLUS
CN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxooctadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

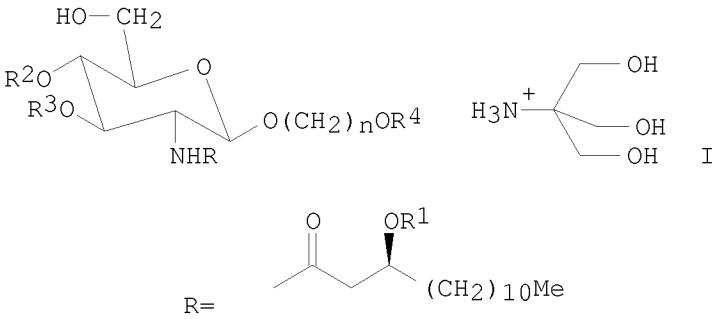


RN 155780-15-7 HCAPLUS
CN Pentanoic acid, 4-[[(2S)-2-[[N-acetyl-4-O-[2-(acetylamino)-2-deoxy-6-O-(1-oxo-2-tetradecylhexadecyl)-β-D-glucopyranosyl]normuramoyl]amino]-1-oxobutyl]amino]-5-amino-5-oxo-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



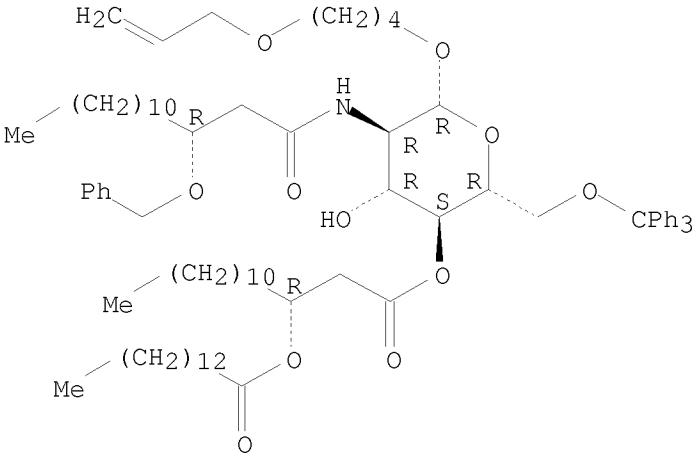
L33 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI New acyclic analogs of lipid A: synthesis of 4-phosphonoxybutyl and 3-phosphonoxypropyl glycosides of 2-amino-2-deoxy-D-glucose
GI



AB Several analogs, I [n = 3, 4; R2 = H, PO3H-, R (R1 = H); R3 = R [R1 = H, CO(CH2)12Me]; R4 = H, PO3H-] of lipid A have been synthesized, in which the reducing monosaccharide moiety of the parent mol. has been replaced by an acyclic spacer. The new compds. show high endotoxic activity and are able to protect neutropenic mice against pseudomonas infection, two properties characteristic of LPS-like mols.
AN 1994:436052 HCAPLUS <<LOGINID::20081210>>
DN 121:36052
OREF 121:6683a,6686a
TI New acyclic analogs of lipid A: synthesis of 4-phosphonoxybutyl and 3-phosphonoxypropyl glycosides of 2-amino-2-deoxy-D-glucose
AU Eustache, Jacques; Grob, Alfred; Retscher, Hannelore

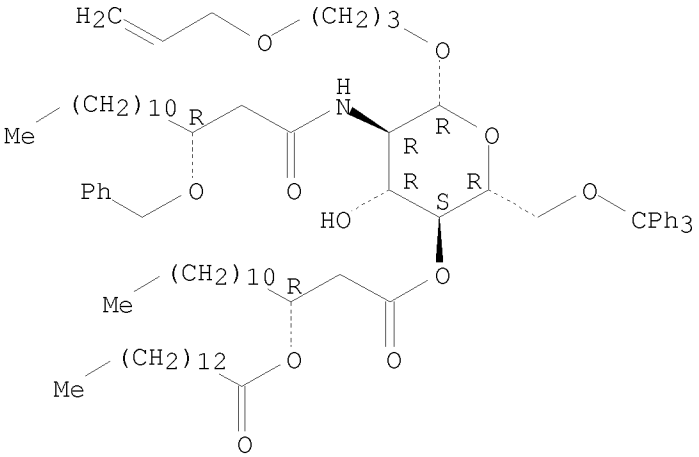
CS Sandoz Forschungsinst. Wien, Vienna, A-1235, Austria
SO Carbohydrate Research (1994), 251, 251-67
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
IT 155739-65-4P 155739-66-5P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in synthesis of lipid A analogs)
RN 155739-65-4 HCAPLUS
CN β-D-Glucopyranoside, 4-(2-propenyloxy)butyl
2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-
, 4-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),4(R)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



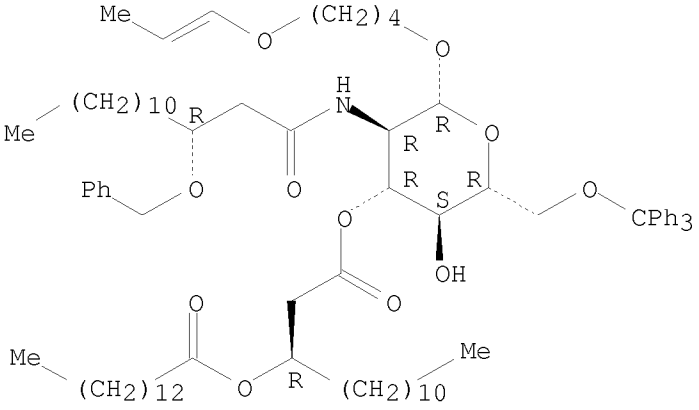
RN 155739-66-5 HCAPLUS
CN β-D-Glucopyranoside, 3-(2-propenyloxy)propyl
2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-
, 4-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),4(R)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



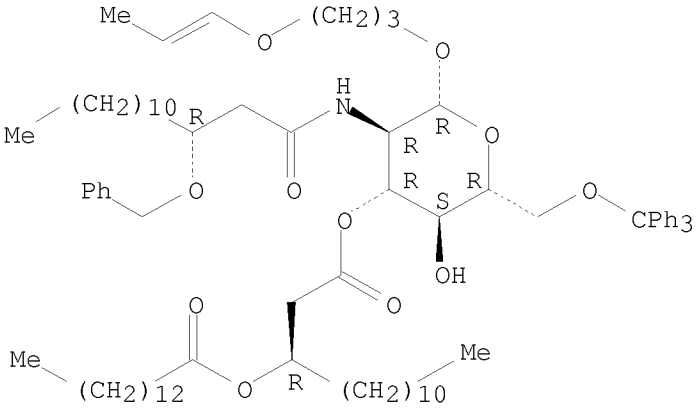
IT 155739-68-7P 155739-69-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of, in synthesis of lipid A analogs)
RN 155739-68-7 HCAPLUS
CN β-D-Glucopyranoside, 4-(1-propenyloxy)butyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 155739-69-8 HCAPLUS
CN β-D-Glucopyranoside, 3-(1-propenyloxy)propyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

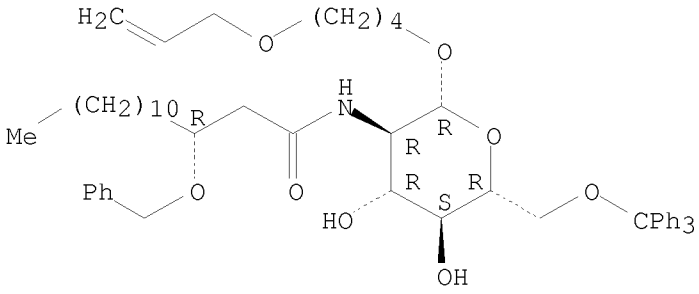


IT 155739-45-0P 155739-47-2P 155739-48-3P
155739-49-4P 155739-50-7P 155739-51-8P
155739-52-9P 155751-71-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation and reaction of, in synthesis of lipid A analogs)

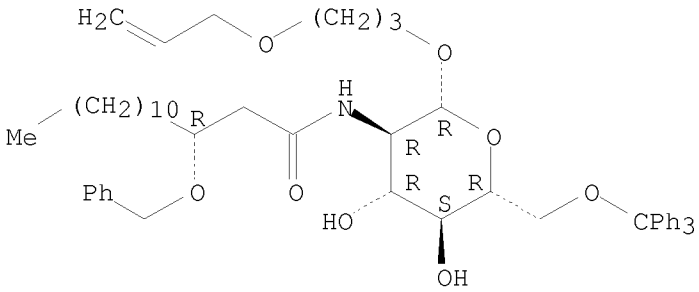
RN 155739-45-0 HCAPLUS
CN β-D-Glucopyranoside, 4-(2-propenyloxy)butyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



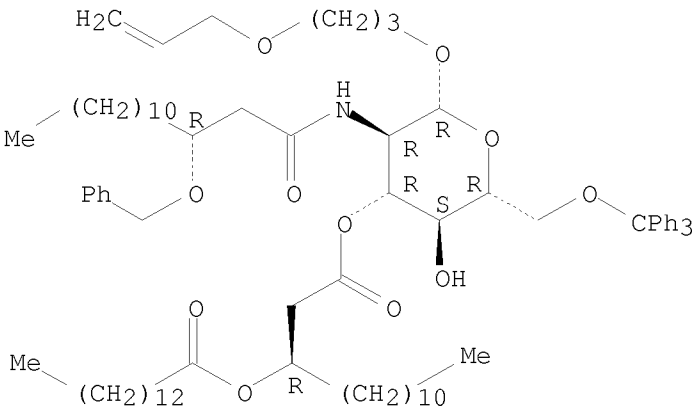
RN 155739-47-2 HCAPLUS
CN β-D-Glucopyranoside, 3-(2-propenyloxy)propyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



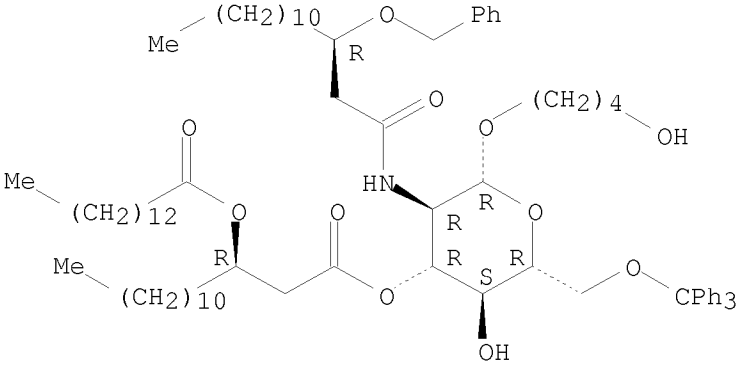
RN 155739-48-3 HCAPLUS
CN β-D-Glucopyranoside, 3-(2-propenyloxy)propyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



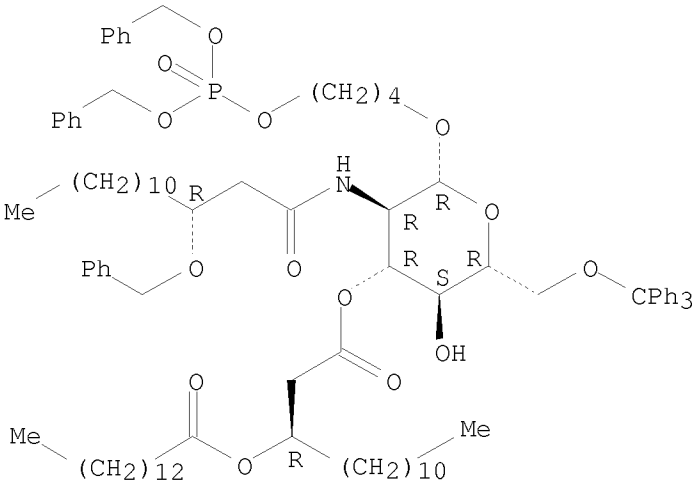
RN 155739-49-4 HCAPLUS
CN β-D-Glucopyranoside, 4-hydroxybutyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



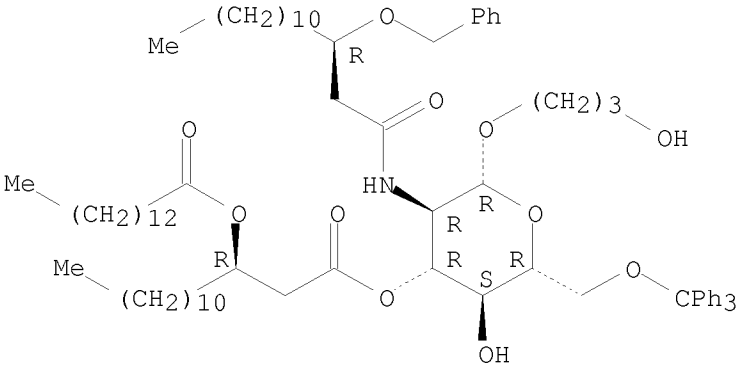
RN 155739-50-7 HCAPLUS
CN β-D-Glucopyranoside, 4-[[bis(phenylmethoxy)phosphinyl]oxy]butyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



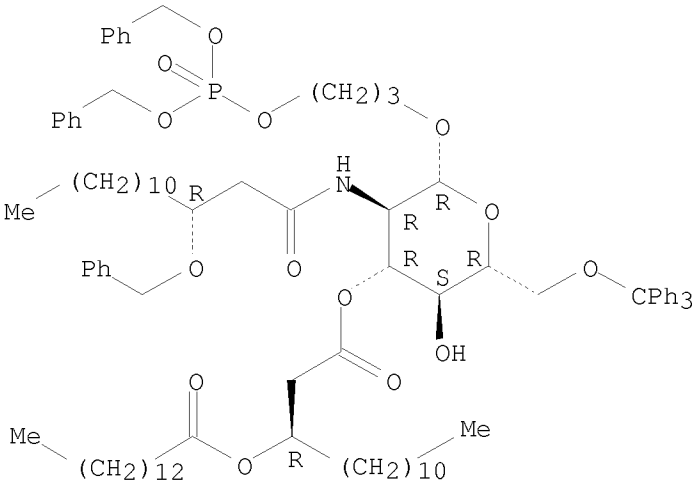
RN 155739-51-8 HCAPLUS
CN β-D-Glucopyranoside, 3-hydroxypropyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



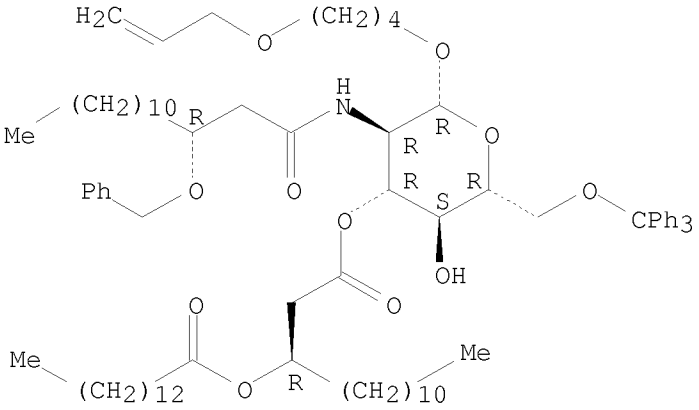
RN 155739-52-9 HCAPLUS
CN β-D-Glucopyranoside, 3-[[bis(phenylmethoxy)phosphinyl]oxy]propyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

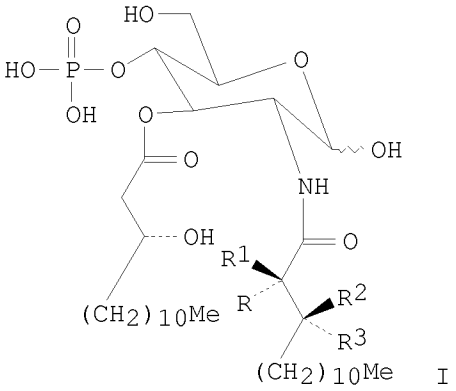


RN 155751-71-6 HCAPLUS
CN β-D-Glucopyranoside, 4-(2-propenyloxy)butyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Syntheses of 2-deoxy-2-[(2R,3S)-2-fluoro-3-hydroxytetradecanamido]-3-O-[(3R)-3-hydroxytetradecanoyl]-4-O-phosphono-D-glucopyranose and its (2S,3R)-isomer
GI



I

AB Title compds. I (R = R3 = H, R 2 = OH, R3 = F; R = F, R1 = R2 = H, R3 = OH) were prepared from allyl 2-[(2R,3S)-3-(benzyloxycarbonyloxy)-2-fluorotetradecanamido]-2-deoxy-4,6-O-isopropylidene-β-D-glucopyranoside and its corresponding (2S,3R)isomer. Compds. I did no activate macrophage, but the (2S,3R)-analog strongly inhibited the binding of LPS to macrophage.

AN 1994:192121 HCAPLUS <<LOGINID::20081210>>

DN 120:192121

OREF 120:34023a,34026a

TI Syntheses of 2-deoxy-2-[(2R,3S)-2-fluoro-3-hydroxytetradecanamido]-3-O-[(3R)-3-hydroxytetradecanoyl]-4-O-phosphono-D-glucopyranose and its (2S,3R)-isomer

AU Shiozaki, Masao; Arai, Masami; Hiraoka, Tetsuo; Nishijima, Masahiro; Akamatsu, Yuzuru

CS New Lead Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan

SO Bioscience, Biotechnology, and Biochemistry (1993), 57(9), 1526-9
CODEN: BBBIEJ; ISSN: 0916-8451

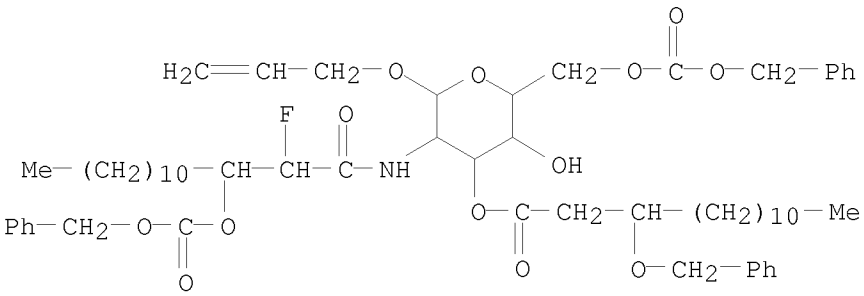
DT Journal

LA English

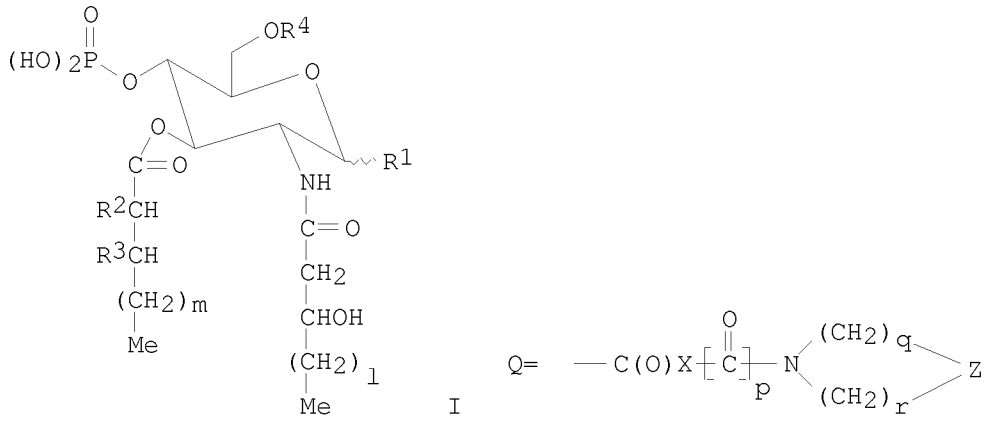
IT 132760-39-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(intermediate in preparation of fluorohydroxyamidoglucopyranoses)

RN 132760-39-5 HCAPLUS

CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[2-fluoro-1-oxo-3-[[(phenylmethoxy)carbonyl]oxy]tetradecyl]amino]-, 3-[3-(phenylmethoxy)tetradecanoate] 6-(phenylmethyl carbonate), [2(2S,3R),3(R)]- (9CI) (CA INDEX NAME)



L33 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of 6-aminoacyl-substituted lipid A analogs
GI



AB The title compds. [I; R1 = H, HO; one of R2 and R3 = O2C(CH2)nMe, CH2(CH2)nMe, or OCH2(CH2)nMe, and the other = H; R4 = C(O)X(CO)pY, Q; X = (un)substituted linear or branched lower alkylene; Y = (un)substituted NH2; Z = (un)substituted NH or CH2, O; l, m, n = 4-16; p = 0,1; q = 0-4; r = 1-3], having lipid A-like activities and useful as antitumor agents and immunostimulants, are prepared Thus, amidation of 2-amino-1,5-anhydro-2-deoxy-4,6-O-isopropylidene-D-glucitol with (R)-3-[2-(trimethylsilyl)ethoxymethoxy]tetradecanoic acid in the presence of 1-ethyl-2,3-(diethylaminopropyl)carbodiimide (WSC)-HCl in CH2Cl2 followed by esterification with (R)-2-dodecylhexadecanoic acid in the presence of 4-dimethylaminopyridine (DMAP) and WSC.HCl in CH2Cl2 and deisopropylidenation with 95% aqueous AcOH at 50° gave 1,5-anhydro-2-deoxy-3-O-[(2RS)-2-dodecylhexadecanoyl]-2-[(3R)-3-[2-(trimethylsilyl)ethoxymethoxy]tetradecanamido]-D-glucitol (II). Esterification of II with Me2NCH2CO2H in the presence of WSC.HCl and DMAP in CH2Cl2 followed by sulfonylation with (PhO)2P(O)Cl in the presence of DMAP and WSC.HCl in CH2Cl2 gave, after deprotection with Et2O.BF3 and hydrogenolysis over PtO2 in AcOH, I [R1 = R3 = H, R2 = (CH2)11Me, R4 = COCH2NMe2, l = 10, m = 12]. I [R1 = R3 = H, R2 = (CH2)11Me, R4 = (S)-COCHMeNH2, l = m = 10] at 10 μg/mouse i.v. increased the production of TNF from <10 (control) to 421,283 U/mL in mice treated i.v. with a first stimulant, Corynebacterium parvum. A total of 19 I were prepared
AN 1993:560726 HCAPLUS <<LOGINID::20081210>>
DN 119:160726
OREF 119:28829a,28832a
TI Preparation of 6-aminoacyl-substituted lipid A analogs
IN Hasegawa, Akira; Kiso, Makoto; Agari, Shinichi; Ishida, Tomio; Goto, Hiroyuki; Waga, Iwao
PA Nippon Tobacco Sangyo, Japan
SO Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05059079	A	19930309	JP 1991-296695	19910827 <--
PRAI	JP 1991-296695		19910827 <--		

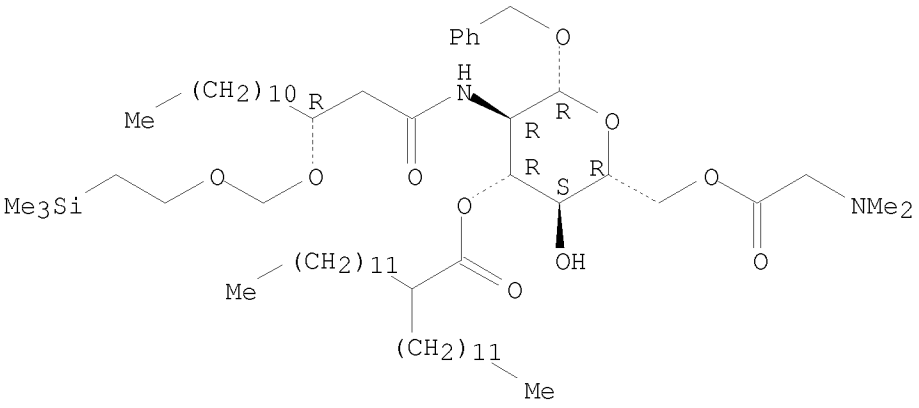
OS MARPAT 119:160726

IT 149895-83-0P 149924-02-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for lipid A analog)

RN 149895-83-0 HCAPLUS

CN Glycine, N,N-dimethyl-, 6-ester with phenylmethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-β-D-glucopyranoside 3-(2-dodecyltetradecanoate), (R)- (9CI) (CA INDEX NAME)

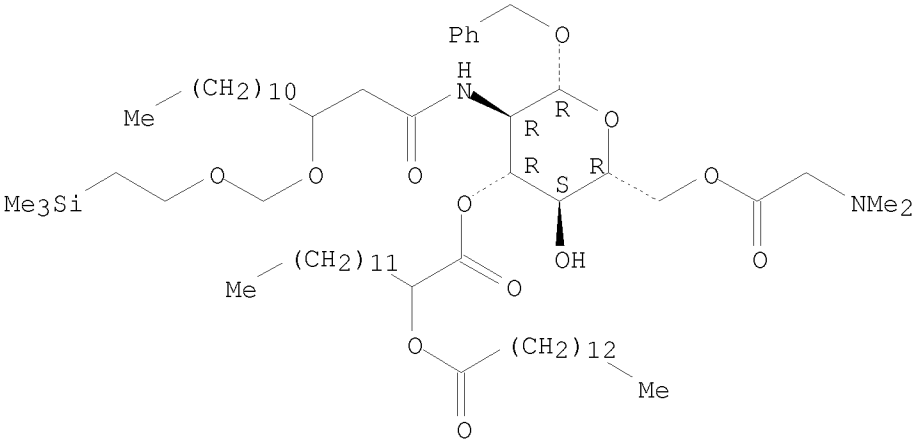
Absolute stereochemistry.



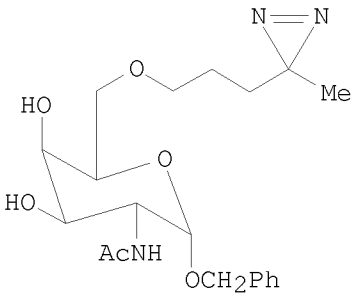
RN 149924-02-7 HCAPLUS

CN Glycine, N,N-dimethyl-, 6-ester with phenylmethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-β-D-glucopyranoside 3-[2-[(1-oxotetradecyl)oxy]tetradecanoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.



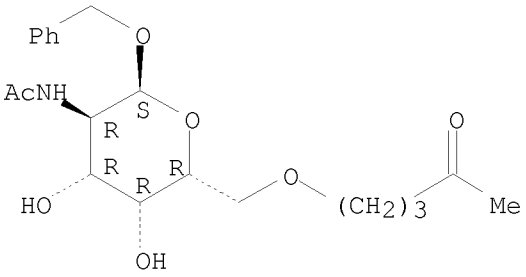
L33 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Building units of oligosaccharides. CII. Synthesis of modified derivatives of 2-acetamido-2-deoxy-D-galactose for examination of substrate specificities of core 1-β3-Gal-transferase and core 3-β3-GlcNAc-transferase involved in the biosynthesis of O-glycoproteins
GI



II

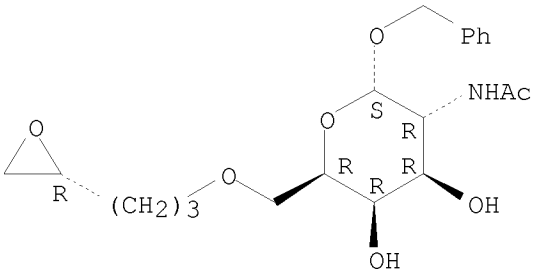
AB The 2-, 3-, 4-, and 6-deoxy derivative of benzyl 2-acetamido-2-deoxy-α-D-galactopyranoside have been synthesized to test substrate specificities of the title glycosyltransferases. The core 1 β3-gal-transferase (I) does not require the 6-OH group for activity in contrast to the core 3-β3-GlcNAc-transferase which requires the 6-OH group. Compds. with reactive groups replacing the 6-OH group, such as the diazirine II, may be suitable for photolabeling I. A column for affinity chromatog. with the 6-deoxy derivative as the ligand may be useful for separating the two enzymes during purification
AN 1993:169478 HCAPLUS <<LOGINID::20081210>>
Correction of: 1992:408334
DN 118:169478
Correction of: 117:8334
OREF 118:29081a,29084a
TI Building units of oligosaccharides. CII. Synthesis of modified derivatives of 2-acetamido-2-deoxy-D-galactose for examination of substrate specificities of core 1-β3-Gal-transferase and core 3-β3-GlcNAc-transferase involved in the biosynthesis of O-glycoproteins
AU Paulsen, Hans; Rutz, Volker; Brockhausen, Inka
CS Inst. Org. Chem., Univ. Hamburg, Hamburg, W-2000/13, Germany
SO Liebigs Annalen der Chemie (1992), (7), 735-45
CODEN: LACHDL; ISSN: 0170-2041
DT Journal
LA German
OS CASREACT 118:169478
IT 141019-96-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with hydroxylaminesulfonic acid)
RN 141019-96-7 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-(4-oxopentyl)- (CA INDEX NAME)

Absolute stereochemistry.



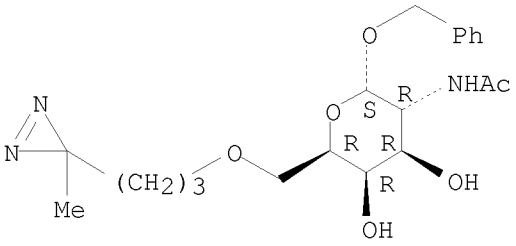
IT 141019-94-5P 141019-97-8P 141020-05-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as glycosyl transferase substrate)
RN 141019-94-5 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl
2-(acetylamino)-2-deoxy-6-O-(3-oxiranylpropyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



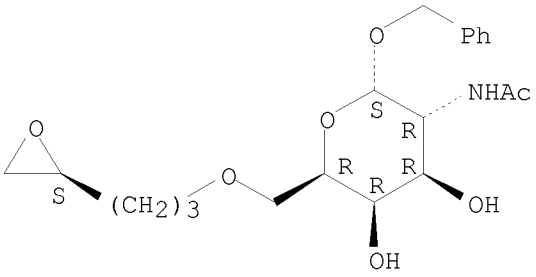
RN 141019-97-8 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl
2-(acetylamino)-2-deoxy-6-O-[3-(3-methyl-3H-diazirin-3-yl)propyl]- (CA INDEX NAME)

Absolute stereochemistry.

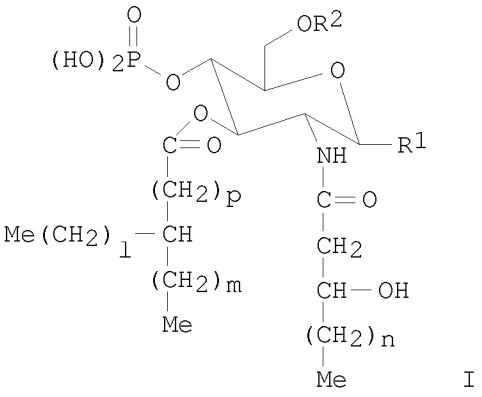


RN 141020-05-5 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl
2-(acetylamino)-2-deoxy-6-O-(3-oxiranylpropyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of 6-substituted lipid A analogs as immunostimulants and antitumor agents
GI



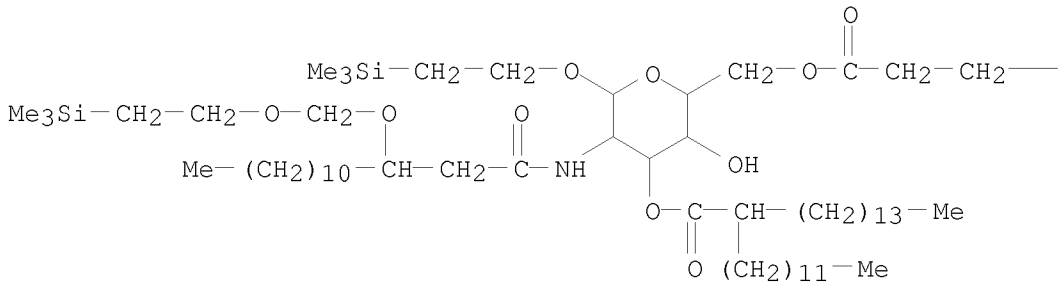
AB The title compds. [I; R1 = H, OH; R2 = COR3; R3 = CO2H or lower alkoxycarbonyl-substituted) linear or branched lower alkyl; l = 5-17; m = 7-19; n = 4-16; p = 0,1] are prepared Thus, acylation of 2-amino-1,5-anhydro-2-deoxy-4,6-O-isopropylidene-D-glucitol with (R)-3-[2-(trimethylsilyl)ethoxymethoxy]tetradecanoic acid followed by (R,S)-2-dodecylhexadecanoic acid in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in CH2Cl2 gave N,O -diacyl derivative which was treated with 95% AcOH at 50 °, 6-acylated with 3-(methoxycarbonyl)propionyl chloride in the presence of pyridine in CHCl3, 4-phosphorylated with (PhO)2POCl in the presence of pyridine in CH2Cl2, and then deprotected with BF3.Et2O to give I [R1 = H, R2 = CO(CH2)2CO2Me, l = 11, m = 13, n = 10, p = 0]. This in vivo enhanced the production of tumor necrosis factor from <10 U/mL (control) in serum to 727,800 U/mL in mice treated with Corynebacterium parvum i.v.
AN 1993:147982 HCAPLUS <<LOGINID::20081210>>
DN 118:147982
OREF 118:25459a,25462a
TI Preparation of 6-substituted lipid A analogs as immunostimulants and antitumor agents
IN Hasegawa, Akira; Kiso, Makoto; Agari, Shinichi; Ishida, Tomio; Suzuki,

Masanobu; Saito, Yutaka
PA Japan Tobacco, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

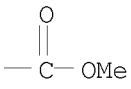
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 04234895	A	19920824	JP 1991-115723	19910227 <--
WO 9311139	A1	19930610	WO 1991-JP1628	19911127 <--
W: CA, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 593765	A1	19940427	EP 1991-920691	19911127 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRAI JP 1990-45483	A1	19900228 <--		
WO 1991-JP1628	W	19911127 <--		

OS MARPAT 118:147982
IT 146371-05-3P 146371-17-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for lipid A analog immunostimulant and antitumor agent)
RN 146371-05-3 HCAPLUS
CN β-D-Glucopyranoside, 2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-, 3-(2-dodecylhexadecanoate) 6-(methyl butanedioate) (9CI) (CA INDEX NAME)

PAGE 1-A

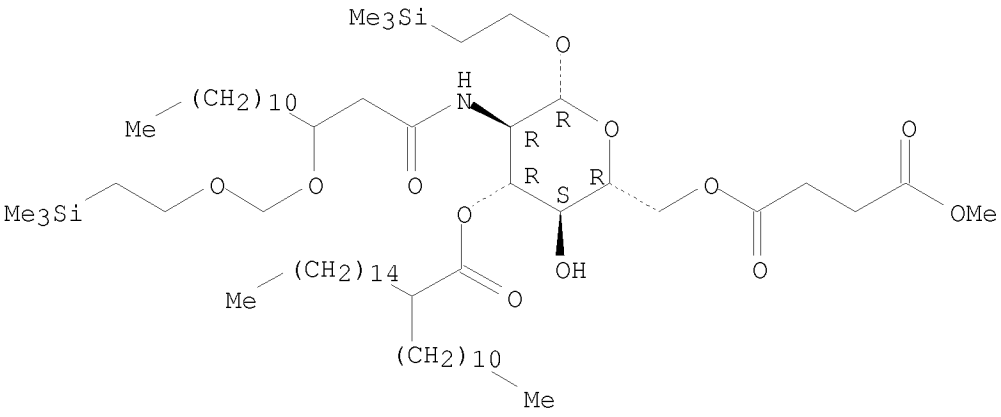


PAGE 1-B

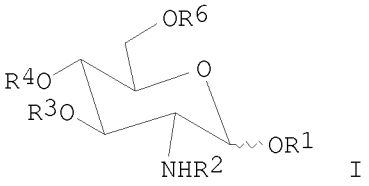


RN 146371-17-7 HCAPLUS
CN β-D-Glucopyranoside, 2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-, 6-(methyl butanedioate) 3-(2-undecylheptadecanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of lipid X analogs as immunostimulants and antitumor agents
GI

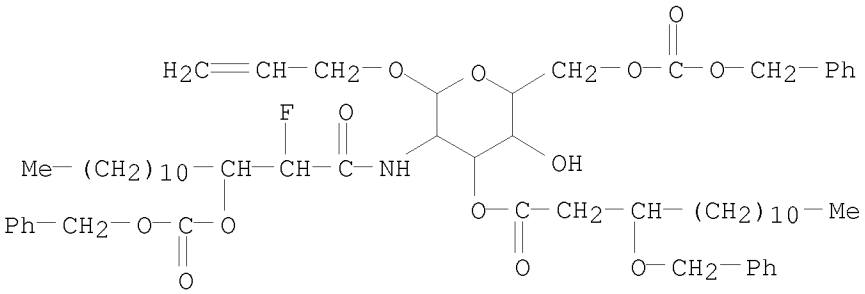


AB The title compds. [I; one of R1, R4 = H, P(O)(OH)2 , OH-protecting group, and the other = P(O)(OH)2; R2, R3 = (un)substituted C6-20 acyl; R6 = H, OH-protecting group; provided that both R2 and R3 ≠ (HO- or C2-20 acyl-substituted) C6-20 acyl], having excellent macrophage-activating activity with little toxicity, are prepared Thus, acylation of allyl 2-deoxy-2-amino-4,6-isopropylidene-β-D-glucopyranoside with (R)-3-benzyloxymyristic acid followed by (±)-syn-2-fluoro-3-benzyloxycarbonyloxymyristic acid in the presence of DCC in CH2Cl2 gave β-I [R1 = allyl, R2 = (3'R)-3'-benzyloxymyristoylamino, R3 = (2''RS,3''SR)-2''-fluoro-3''-(benzyloxycarbonyloxy)myristoyl, R4R6 = isopropylidene] which was deprotected with 1,5-cyclooctadiene-bis(methyldiphenylphosphine)iridium hexafluorophosphate, H2O, iodine, and pyridine in THF to give I [R1 = OH, R2 = (3'R)-3'-benzyloxymyristoylamino, R3 = (2''RS,3''SR)-2''-fluoro-3''-(benzyloxycarbonyloxy)myristoyl, R4R6 = isopropylidene]. This was acylated with (PhCH2O)2POCl in the presence of BuLi in THF at -78° followed by hydrogenolysis over 10% Pd-C at -78° and simultaneous deacetonation to give I [R1 = P(O)(OH)2, R2 = (3'R)-3'-benzyloxymyristoylamino, R3 = (2''RS,3''SR)-2''-fluoro-3''-(benzyloxycarbonyloxy)myristoyl, R4 = R6 = H]. When I [R1 = R6 = H, R2 = COCH2(OH)C11H23, R3 = COCHF(O2CC13H27)C11H23, R4 = P(O)(OH)2] (sic) was incubated for 18 h with [14C]-arachidonic acid in animal cells [J. Bio. Chemical, volume 262(35) page 17, 212-17, 220], the count of labeled prostaglandin, which was correlated to macrophage activity, was 185/min.

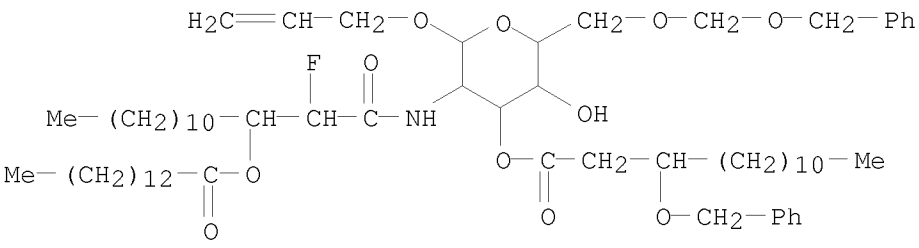
AN 1993:147981 HCAPLUS <<LOGINID::20081210>>
DN 118:147981
OREF 118:25459a,25462a
TI Preparation of lipid X analogs as immunostimulants and antitumor agents
IN Shiosaki, Masao; Ishida, Noboru; Arai, Masami; Kobayashi, Tomoo; Hiraoka, Tetsuo; Nishijima, Masahiro; Akamatsu, Minoru
PA Sankyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 04235193	A	19920824	JP 1991-147075	19910619 <--
JP 3040847	B2	20000515		
PRAI JP 1990-164646	A1	19900622 <--		

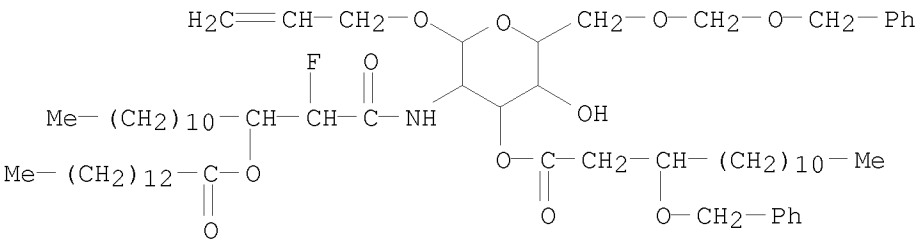
OS MARPAT 118:147981
IT 132760-39-5P 132828-16-1P 132882-54-3P
138527-79-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for immunostimulant and antitumor lipid X analog)
RN 132760-39-5 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[2-fluoro-1-oxo-3-[[(phenylmethoxy)carbonyl]oxy]tetradecyl]amino]-, 3-[3-(phenylmethoxy)tetradecanoate] 6-(phenylmethyl carbonate), [2(2S,3R),3(R)]- (9CI) (CA INDEX NAME)



RN 132828-16-1 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[2-fluoro-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-, 3-[3-(phenylmethoxy)tetradecanoate], [2(2S,3R),3(R)]- (9CI) (CA INDEX NAME)

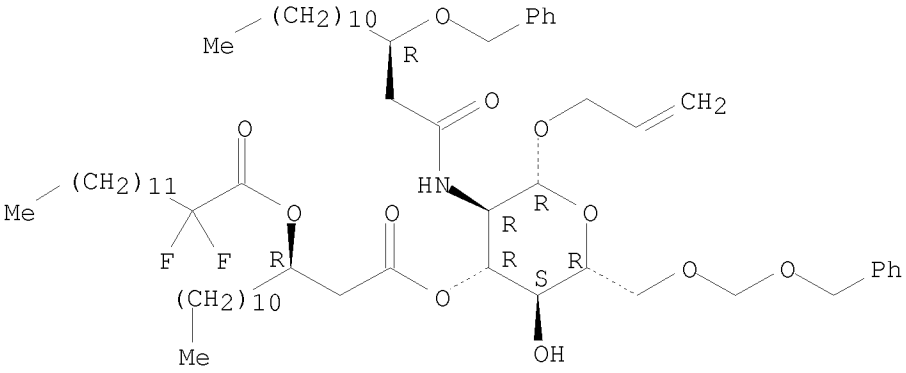


RN 132882-54-3 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[2-fluoro-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-, 3-[3-(phenylmethoxy)tetradecanoate], [2(2R,3S),3(R)]- (9CI) (CA INDEX NAME)



RN 138527-79-4 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-, 3-[3-[(2,2-difluoro-1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

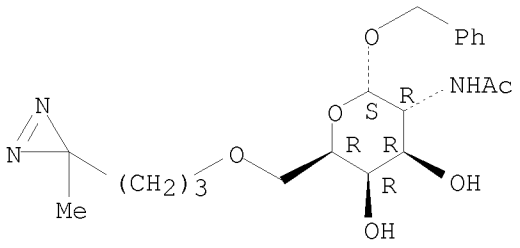


L33 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Control of O-glycan synthesis: specificity and inhibition of O-glycan core 1 UDP-galactose:N-acetylgalactosamine-α-R β3-galactosyltransferase from rat liver
AB The specificity of glycosyltransferases is a major control factor in the biosynthesis of O-glycans. The enzyme that synthesizes O-glycan core 1, i.e., UDP-galactose:N-acetylgalactosamine-α-R β3-galactosyltransferase (β3-Gal-T; EC 2.4.1.122), was partially purified from rat liver. The enzyme preparation, free of pyrophosphatases, β4-galactosyl-transferase, β-galactosidase, and N-acetylglucosaminyltransferase I, was used to study the specificity and inhibition of the β3-Gal-T. β3-Gal-T activity is sensitive to changes in the R-group of the GalNAcα-R acceptor substrate and is stimulated when the R-group is a peptide or an aromatic group. Derivs. of GalNAcα-benzyl were synthesized and tested as potential substrates and inhibitors. Removal or substitution of the 3-hydroxyl or removal of the 4-hydroxyl of GalNAc abolished β3-Gal-T activity. Compds. with

modifications of the 3- or 4-hydroxyl of GalNAcα-benzyl did not show significant inhibition. Removal or substitution of the 6-hydroxyl of GalNAc reduced activity slightly and these derivs. acted as competitive substrates. Derivs. with epoxide groups attached to the 6-position of GalNAc acted as substrates and not as inhibitors, with the exception of the photosensitive 6-O-(4,4-azo)phenyl-GalNAcα-benzyl, which inhibited Gal incorporation into GalNAcα-benzyl. The results indicate that the enzyme does not require the 6-hydroxyl of GalNAc, but needs the 3- and the axial 4-hydroxyl as essential requirements for binding and activity. In the usual biochem. O-glycan pathway, core 2 (GlcNAcβ6[Galβ3]GalNAcα-R) is formed from core 1 (Galβ3GalNAc-R). Thus an alternate pathway has been demonstrated that may be of importance in human tissues.

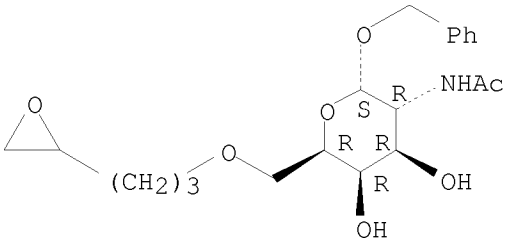
AN 1992:507008 HCAPLUS <<LOGINID::20081210>>
DN 117:107008
OREF 117:18545a,18548a
TI Control of O-glycan synthesis: specificity and inhibition of O-glycan core 1 UDP-galactose:N-acetylgalactosamine-α-R β3-galactosyltransferase from rat liver
AU Brockhausen, Inka; Moller, Gabriele; Pollex-Kruger, Annette; Rutz, Volker; Paulsen, Hans; Matta, Khushi L.
CS Res. Inst., Hosp. Sick Child., Toronto, ON, M5G 1X8, Can.
SO Biochemistry and Cell Biology (1992), 70(2), 99-108
CODEN: BCBIEQ; ISSN: 0829-8211
DT Journal
LA English
IT 141019-97-8 142925-54-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with UDP-galactose-acetylgalactosamine galactosyltransferase of liver, substrate structure in relation to)
RN 141019-97-8 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-[3-(3-methyl-3H-diazirin-3-yl)propyl]- (CA INDEX NAME)

Absolute stereochemistry.

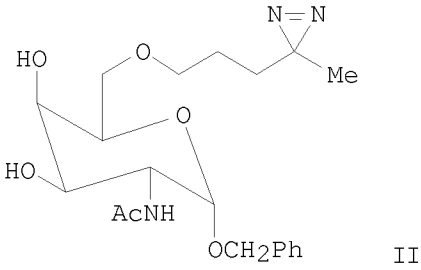


RN 142925-54-0 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-(3-oxiranylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Building units of oligosaccharides. CII. Synthesis of modified derivatives of 2-acetamido-2-deoxy-D-galactose for examination of substrate specificities of core 1-β3-Gal-transferase and core 3-β3-GlcNAc-transferase involved in the biosynthesis of O-glycoproteins
GI



II

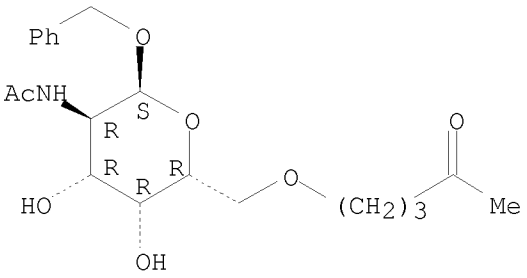
AB The 2-, 3-, 4-, and 6-deoxy derivs. of benzyl 2-acetamido-2-deoxy-α-D-galactopyranoside have been synthesized to test substrate specificities of the title glycosyltransferases. The core 1 β3-gal-transferase (I) does not require the 6-OH group for activity in contrast to the core 3-β3-GlcNAc-transferase which requires the 6-OH group. Compds. with reactive groups replacing the 6-OH group such as the diazirine II could be suitable for photolabeling of the former enzyme. A column for affinity chromatog. with the 6-deoxy derivative as the ligand could be useful for separating the two enzymes during purification
AN 1992:408334 HCAPLUS <<LOGINID::20081210>>
DN 117:8334
OREF 117:1687a,1690a
TI Building units of oligosaccharides. CII. Synthesis of modified derivatives of 2-acetamido-2-deoxy-D-galactose for examination of substrate specificities of core 1-β3-Gal-transferase and core 3-β3-GlcNAc-transferase involved in the biosynthesis of O-glycoproteins
AU Paulsen, Hans; Rutz, Volker; Brockhausen, Inka
CS Inst. Org. Chem., Univ. Hamburg, Hamburg, W-2000/13, Germany
SO Liebigs Annalen der Chemie (1992), (5), 513-21
CODEN: LACHDL; ISSN: 0170-2041
DT Journal
LA German
IT 141019-96-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with hydroxylaminesulfonic acid)

RN 141019-96-7 HCAPLUS

CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-(4-oxopentyl)- (CA INDEX NAME)

Absolute stereochemistry.

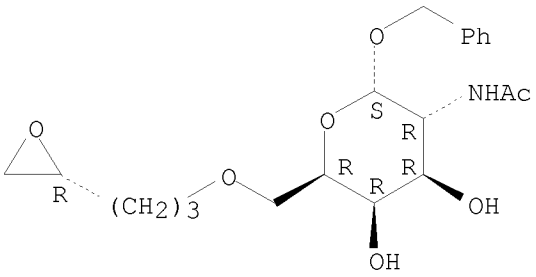


IT 141019-94-5P 141019-97-8P 141020-05-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as glycosyltransferase substrate)

RN 141019-94-5 HCAPLUS

CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-(3-oxiranylpropyl)-, (R)- (9CI) (CA INDEX NAME)

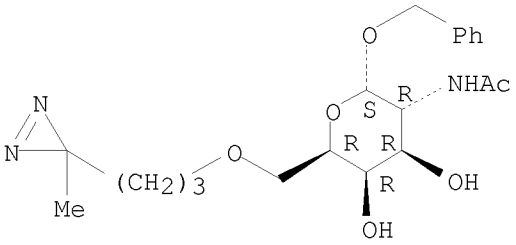
Absolute stereochemistry.



RN 141019-97-8 HCAPLUS

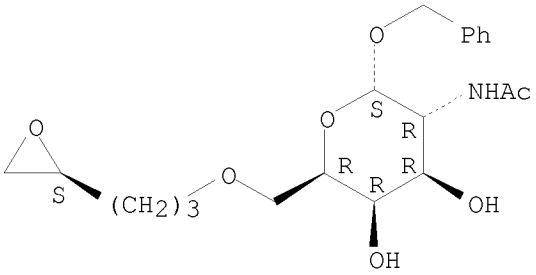
CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-[3-(3-methyl-3H-diazirin-3-yl)propyl]- (CA INDEX NAME)

Absolute stereochemistry.

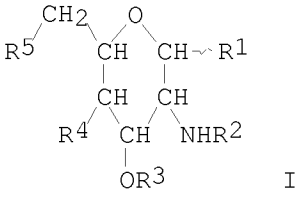


RN 141020-05-5 HCAPLUS
CN α-D-Galactopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-6-O-(3-oxiranylpropyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of lipid A analogs as immunostimulants and antitumor activity
GI



I

AB The title compds. [I; R1, R5 = (protected) OH, F, OP(O)(OH)2; R2, R3 = (substituted) aliphatic acyl; R4 = (protected) OH, OP(O)(OH)2; with provisos] were prepared Allyl 2-deoxy-2-amino-4,6-O-isopropylidene-β-D-glucopyranoside (preparation given) was condensed with (R)-3-benzyloxytetradecanoic acid in CH2Cl2 containing DCC to give allyl 2-deoxy-2-[(3R)-3'-benzyloxytetradecanoylamino]-4,6-O-isopropylidene-β-D-glucopyranoside, which was further condensed with (+)-syn-2-fluoro-3-benzyloxycarbonyloxytetradecanoic acid to give allyl 2-deoxy-2-[(3R')-3'-benzyloxytetradecanoylamino]-3-O-[(2''RS,3''SR)-2''-fluoro-3''-(benzyloxycarbonyloxy)tetradecanoyl]-4,6-O-isopropylidene-β-D-glucopyranoside, which in THF was treated with 1,5-cyclohexadienebis[methyldiphenylphosphine]iridium hexafluorophosphate to give 2-deoxy-2-[(3R)-3'-benzyloxytetradecanoylamino]-3-O-[(2''RS,3''SR)-2''-fluoro-3''-(benzyloxycarbonyloxy)tetradecanoyl]-4,6-O-isopropylidene-D-glucopyranose. This was phosphorylated with dibenzyl phosphorochloridate in THF-hexane containing BuLi to give, after hydrogenolysis over Pd/C, 2-deoxy-2-[(3R)-3'-hydroxytetradecanoylamino]-3-O-[(2''RS,3''SR)-2''-fluoro-3''-hydroxytetradecanoyl]-α-D-glucopyranose 1-phosphate. In an in vitro experiment comparing the ability of I to effect release of [14C]-prostaglandin D2 using a macrophage-like mouse cell line J774.1, 2-deoxy-2-[(2'S,3'R)-2'-fluoro-3'-hydroxytetradecanoylamino]-3-O-[(3''R)-tetradecanoyloxy)tetradecanoyl-4,6-O-isopropylidene-α-D-glucopyranose 4-phosphate (prepared similarly) was 18% more active than the

known GLA-60.

AN 1992:214840 HCAPLUS <<LOGINID::20081210>>

DN 116:214840

OREF 116:36429a,36432a

TI Preparation of lipid A analogs as immunostimulants and antitumor activity

IN Shiozaki, Masao; Ishida, Noboru; Kobayashi, Tomowo; Hiraoka, Tetsuo; Arai, Masami; Akamatsu, Yuzuru; Nishijima, Masahiro

PA Sankyo Co., Ltd., Japan

SO Eur. Pat. Appl., 130 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

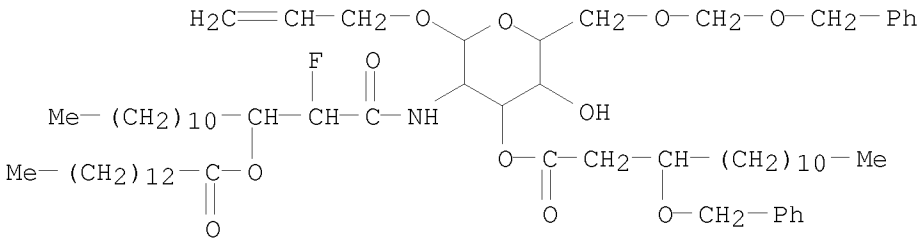
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 437016	A2	19910717	EP 1990-307045	19900627 <--
	EP 437016	B1	19960501		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	JP 02256697	A	19901017	JP 1989-321153	19891211 <--
	JP 2839921	B2	19981224		
	JP 03291292	A	19911220	JP 1990-401087	19901210 <--
	JP 2980693	B2	19991122		
PRAI	JP 1989-321153	A	19891211 <--		
	JP 1990-37339	A	19900220 <--		
	JP 1988-329964	A1	19881227 <--		

OS MARPAT 116:214840

IT 132828-16-1P 132882-54-3P 138527-59-0P
138527-79-4P 138527-88-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for lipid A analogs)

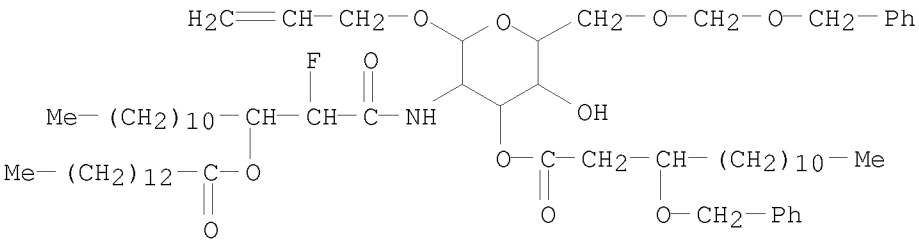
RN 132828-16-1 HCAPLUS

CN β-D-Glucopyranoside, 2-propenyl
2-deoxy-2-[[2-fluoro-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-, 3-[3-(phenylmethoxy)tetradecanoate],
[2(2S,3R),3(R)]- (9CI) (CA INDEX NAME)



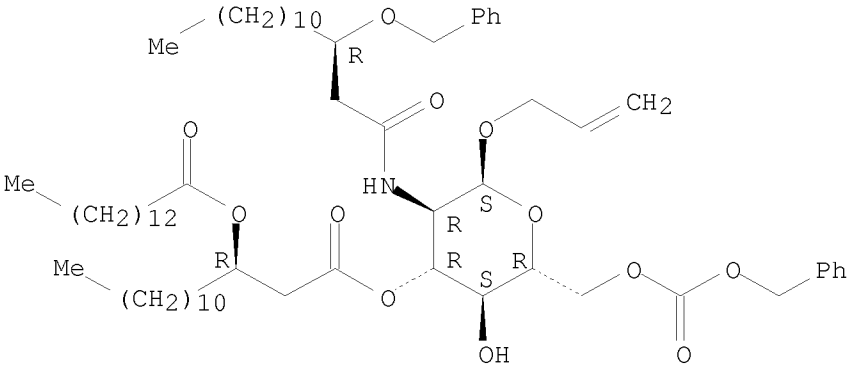
RN 132882-54-3 HCAPLUS

CN β-D-Glucopyranoside, 2-propenyl
2-deoxy-2-[[2-fluoro-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-, 3-[3-(phenylmethoxy)tetradecanoate],
[2(2R,3S),3(R)]- (9CI) (CA INDEX NAME)



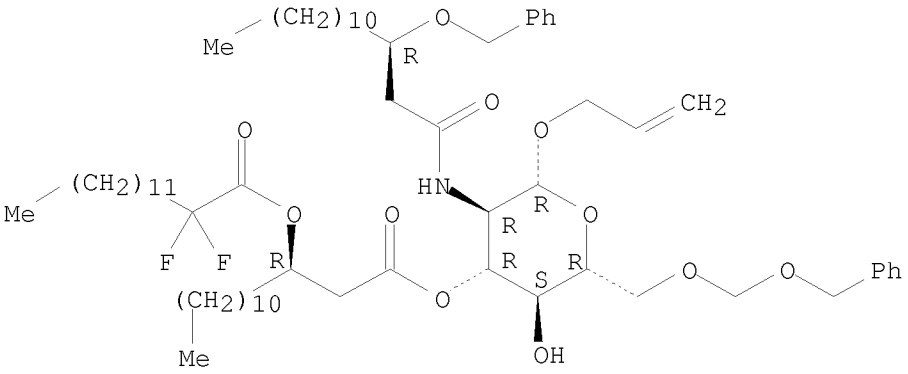
RN 138527-59-0 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl
2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-,
3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] 6-(phenylmethyl carbonate),
[2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 138527-79-4 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl
2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-
[(phenylmethoxy)methyl]-, 3-[3-[(2,2-difluoro-1-
oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

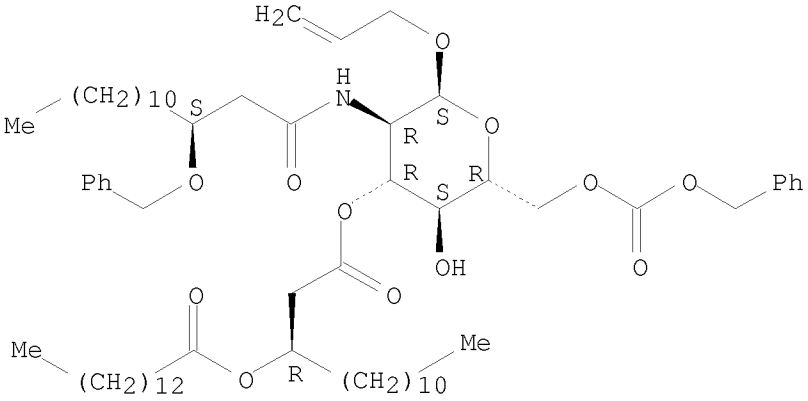
Absolute stereochemistry.



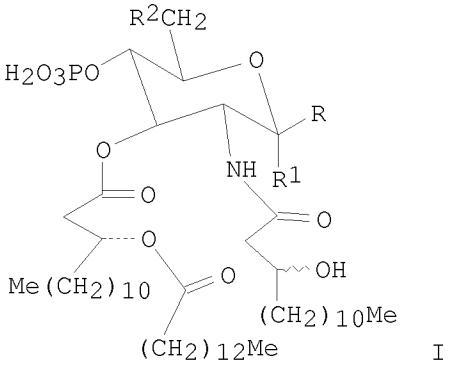
RN 138527-88-5 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl

2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-,
3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] 6-(phenylmethyl carbonate),
[2(S),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Syntheses of 2,6-dideoxy-6-fluoro-2-[(3R and
3S)-3-hydroxytetradecanamido]-3-O-[(3R)-3-(tetradecanoyloxy)-
tetradecanoyl]-D-glucopyranose 4-(dihydrogen phosphate) and 2-deoxy-2-[(3R
and 3S)-3-hydroxytetradecanamido]-3-O-[(3R)-3-
(tetradecanoyloxy)tetradecanoyl]-α-D-glucopyranosyl fluoride
4-(dihydrogen phosphate): fluorosugar analogs of GLA-60
GI



I

AB Fluoro sugar analogs of GLA-60, e.g. I (RR1 = H, OH, R2 = F; R = H, R1 =
F, R2 = OH), were synthesized from allyl
2-deoxy-4,6-O-isopropylidene-2-trifluoroacetamido-α-D-
glucopyranoside.
AN 1992:174611 HCAPLUS <<LOGINID::20081210>>
DN 116:174611
OREF 116:29575a,29578a
TI Syntheses of 2,6-dideoxy-6-fluoro-2-[(3R and
3S)-3-hydroxytetradecanamido]-3-O-[(3R)-3-(tetradecanoyloxy)-
tetradecanoyl]-D-glucopyranose 4-(dihydrogen phosphate) and 2-deoxy-2-[(3R

and 3S)-3-hydroxytetradecanamido]-3-O-[(3R)-3-(tetradecanoyloxy)tetradecanoyl]-α-D-glucopyranosyl fluoride 4-(dihydrogen phosphate): fluorosugar analogs of GLA-60

AU Kobayashi, Yoshiyuki; Ishida, Nobory; Arai, Masami; Shiozaki, Masao; Hiraoka, Tetsuo; Nishijima, Masahiro; Kuge, Sayuri; Otsuka, Toshiaki; Akamatsu, Yuzuru

CS New Lead Res. Lab., Sankyo Co. Ltd., Tokyo, 140, Japan

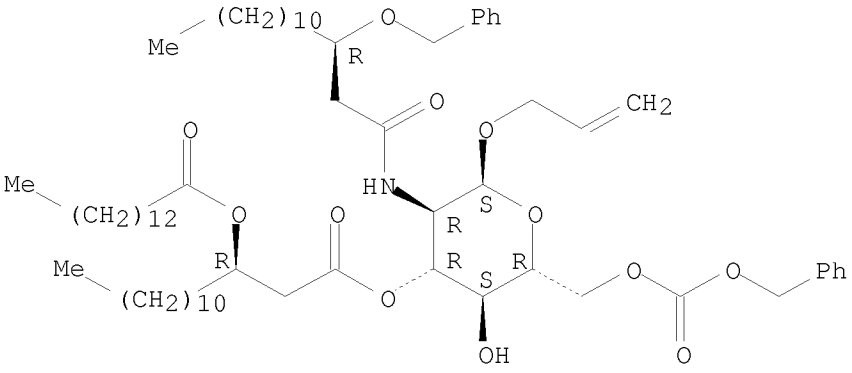
SO Carbohydrate Research (1991), 222, 83-97
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
OS CASREACT 116:174611

IT 138527-59-0P 138527-88-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of)

RN 138527-59-0 HCAPLUS

CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] 6-(phenylmethyl carbonate), [2(R),3(R)]- (9CI) (CA INDEX NAME)

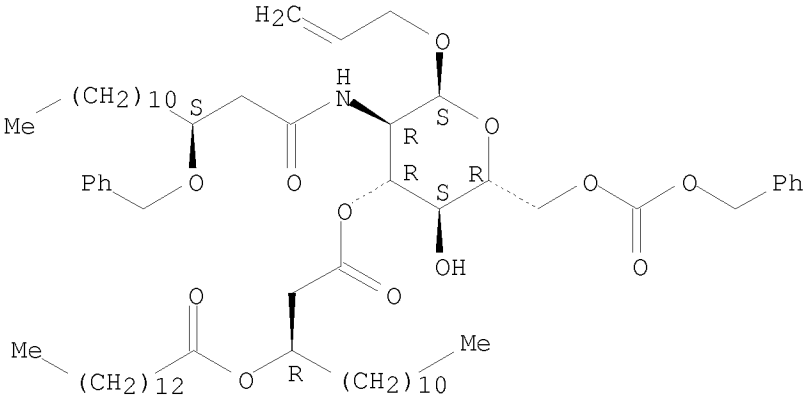
Absolute stereochemistry.



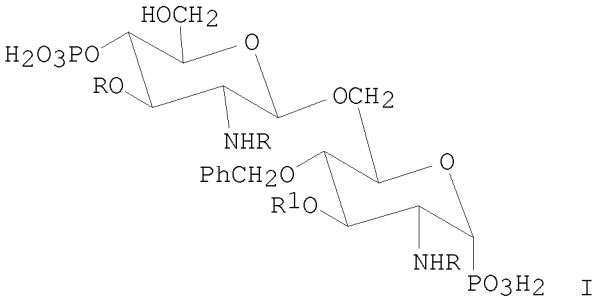
RN 138527-88-5 HCAPLUS

CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] 6-(phenylmethyl carbonate), [2(S),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



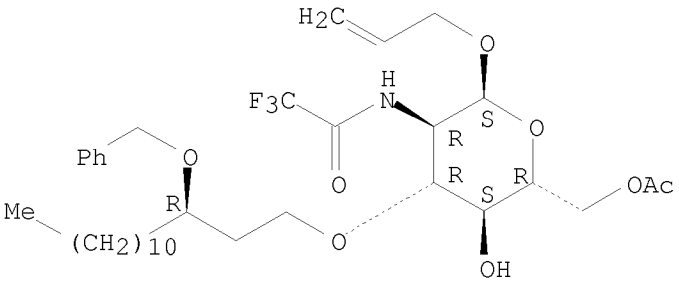
L33 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis of a 3-ether analog of lipid A
GI



I

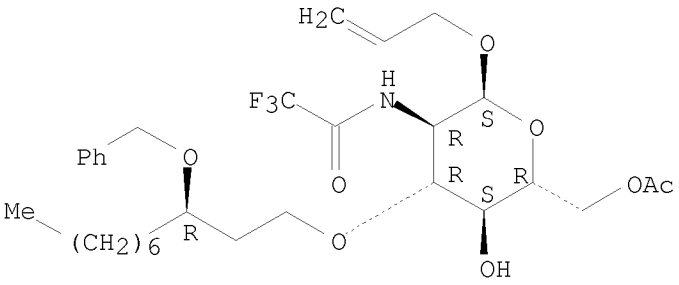
AB Lipid A 3-ether analogs, e.g. I [R = (R)-3-(hydroxy)tetradecanoyl, R1 = (RS)-3-(hydroxy)decanoyl], were synthesized from allyl 2-deoxy-4,6-O-isopropylidene-2-trifluoroacetamido-α-D-glucopyranoside and 3,4,6-tri-O-acetyl-2-trifluoroacetamido-α-D-glucopyranosyl bromide. Compound I showed any endotoxic activity.
AN 1992:152232 HCAPLUS <<LOGINID::20081210>>
DN 116:152232
OREF 116:25785a,25788a
TI Synthesis of a 3-ether analog of lipid A
AU Shiozaki, Masao; Kobayashi, Yoshiyuki; Arai, Masami; Ishida, Noboru; Hiraoka, Tetsuo; Nishijima, Masahiro; Kuge, Sayuri; Otsuka, Toshiaki; Akamatsu, Yuzuru
CS New Lead Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan
SO Carbohydrate Research (1991), 222, 69-82
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
OS CASREACT 116:152232
IT 137014-95-0P 139629-66-6P 139629-81-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and benzylation of)
RN 137014-95-0 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-3-O-[3-(phenylmethoxy)tetradecyl]-2-[(trifluoroacetyl)amino]-, 6-acetate, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



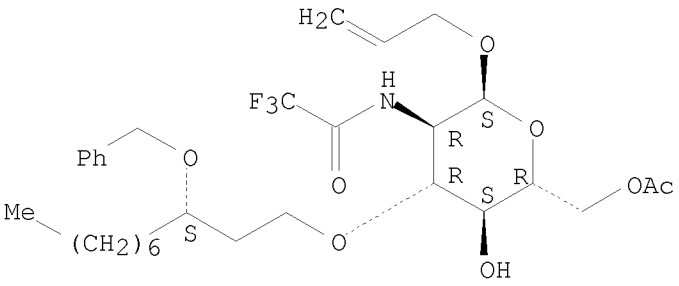
RN 139629-66-6 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl
2-deoxy-3-O-[3-(phenylmethoxy)decyl]-2-[(trifluoroacetyl)amino]-,
6-acetate, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

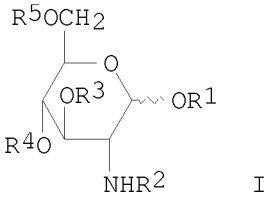


RN 139629-81-5 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl
2-deoxy-3-O-[3-(phenylmethoxy)decyl]-2-[(trifluoroacetyl)amino]-,
6-acetate, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of lipid A monosaccharide analogs as immunostimulants and
antitumor agents.
GI



I

AB The title compds. [I; one of R1,R4 = H, P(O)(OH)2, protecting group; the other = P(O)(OH)2; one of R2,R3 = (halo-, HO-, or C6-20 aliphatic acyloxy-substituted) C6-20 aliphatic acyl and the other = halo-, HO-, or C6-20 aliphatic acyloxy-substituted C6-20 aliphatic acyl, (halo-, HO-, or C6-20 aliphatic acyloxy-substituted) C6-20 alkyl], possessing macrophage-activating activity (no data), are prepared Thus, amidation of I (R1 = allyl, R2 = R3 = H, R4R5 = CMe2) (preparation given) with (R)-3-benzyloxymyristic acid in CH2Cl2 containing DCC followed by esterification with (±)-syn-2-fluoro-3-benzyloxycarboxyloxymyristic acid in CH2Cl2 containing DCC and 4-dimethylaminopyridine gave I [R1 = allyl, R2 = (R)-Me(CH2)10CH(OCH2Ph)CH2CO, R3 = (±)-Me(CH2)10CH(OCO2CH2Ph)CHFCO, R4R5 = CMe2]. The latter was treated with 1,5-cyclooctadiene-bis[methyldiphenylphosphine]iridium hexafluorophosphate and then H2, iodine, and pyridine to give I (R1 = H; R2-R5 = same as above) which was phosphorylated with (PhCH2O)2P(O)Cl in THF in the presence of BuLi followed by hydrogenolysis over 10% Pd/C to give I [R1 = P(O)(OH)2, R2 = (R)-Me(CH2)10CH(OH)CH2CO, R3 = (±)-Me(CH2)10CH(OH)CHFCO, R4 = R5 = H]. Addnl. 19 I were prepared

AN 1992:59901 HCAPLUS <<LOGINID::20081210>>
DN 116:59901
OREF 116:10385a,10388a

TI Preparation of lipid A monosaccharide analogs as immunostimulants and antitumor agents.

IN Shiosaki, Masao; Ishida, Noboru; Kobayashi, Tomoo; Hiraoka, Tetsuo; Akamatsu, Minoru; Nishijima, Masahiro
PA Sankyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 54 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02256697	A	19901017	JP 1989-321153	19891211 <--
	JP 2839921	B2	19981224		
	DD 295854	A5	19911114	DD 1990-342041	19900625 <--
	SU 1836378	A3	19930823	SU 1990-4830600	19900625 <--
	CN 1052481	A	19910626	CN 1990-106805	19900626 <--
	CN 1029405	C	19950802		
	HU 55793	A2	19910628	HU 1990-3991	19900626 <--
	HU 217114	B	19991129		
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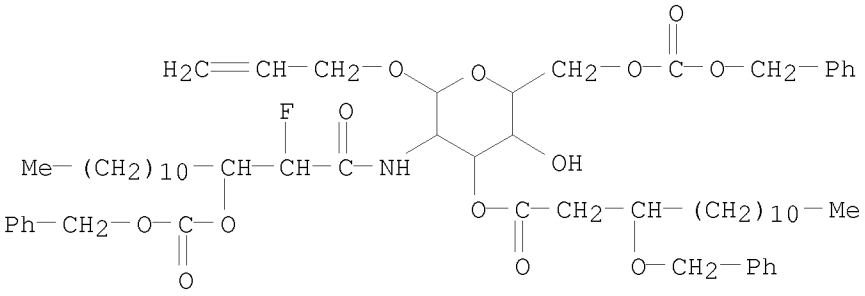
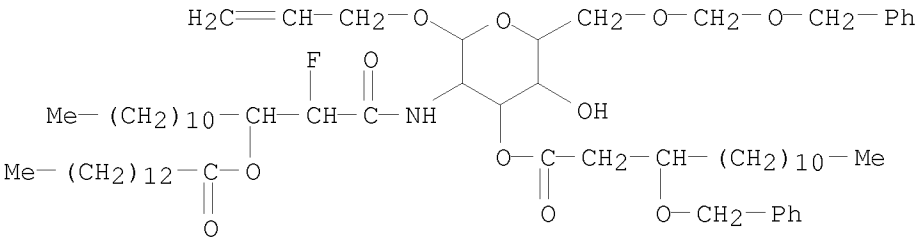
	CA 2019972	C	20000808		
	EP 437016	A2	19910717	EP 1990-307045	19900627 <--
	EP 437016	B1	19960501		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	AT 137504	T	19960515	AT 1990-307045	19900627 <--
	ES 2088970	T3	19961001	ES 1990-307045	19900627 <--

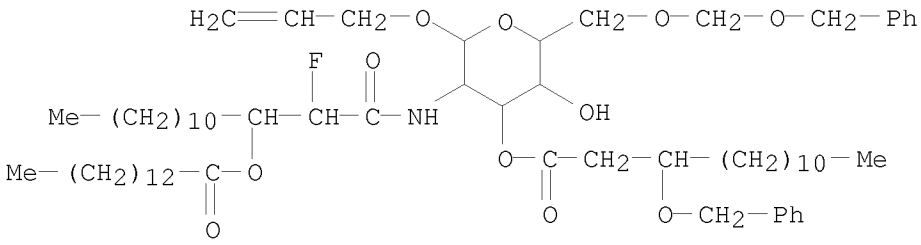
KR 187302 B1 19990401 KR 1990-9570 19900627 <--
RU 2076107 C1 19970327 RU 1992-5052656 19920909 <--
US 5792840 A 19980811 US 1994-280298 19940726 <--
KR 183315 B1 19990401 KR 1998-37538 19980911 <--
PRAI JP 1988-329964 A1 19881227 <--
JP 1989-321153 A 19891211 <--
JP 1990-37339 A 19900220 <--
US 1990-539605 B1 19900618 <--
KR 1990-9570 A 19900627 <--
OS MARPAT 116:59901
IT 132760-39-5P 132828-16-1P 132882-54-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for antitumor and immunostimulant lipid A analog)
RN 132760-39-5 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[2-fluoro-1-oxo-3-[[(phenylmethoxy)carbonyl]oxy]tetradecyl]amino]-, 3-[3-(phenylmethoxy)tetradecanoate] 6-(phenylmethyl carbonate), [2(2S,3R),3(R)]- (9CI) (CA INDEX NAME)



RN 132828-16-1 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[2-fluoro-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-, 3-[3-(phenylmethoxy)tetradecanoate], [2(2S,3R),3(R)]- (9CI) (CA INDEX NAME)



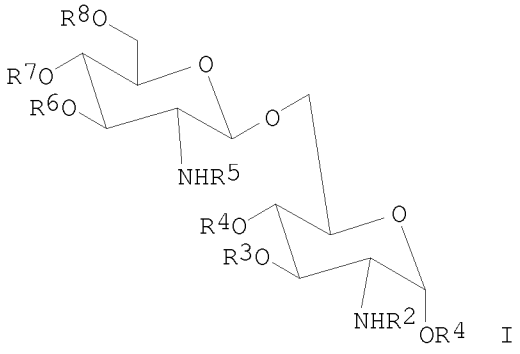
RN 132882-54-3 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-2-[[2-fluoro-1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-, 3-[3-(phenylmethoxy)tetradecanoate], [2(2R,3S),3(R)]- (9CI) (CA INDEX NAME)



L33 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of macrophage-activating lipid A 3-ether analogs as antitumor agents

GI



I

AB 6-O-(β-D-Glucosaminyl)-α-glucosamine derivs. [I; one of R1, R7 = H, P(O)(OR9)2, or HO-protecting group and the other = P(O)(OR9)2; R9 = H, HO-protecting group; R2,R5,R6 = aliphatic acyl optionally containing halo, (un)protected HO, acyloxy; R3 = alkyl optionally containing halo, (un)protected HO, or acyloxy; R4,R8 = H, (un)protected HO] are prepared as antitumor agents (no data). Thus, glycosidation of allyl 2-deoxy-2-[(3'R)-3'-benzyloxymyristoylamino]-3-O-[(3''R)-3''-benzyloxytetradecanyl]-4-O-benzyl-α-D-glucopyranoside (preparation given) with 2-trifluoroacetamido-2-deoxy-3,4,6-triacetyl-D-glucopyranosyl bromide (preparation given) in the presence of Hg(CN)2 and CaSO4 in CHCl3 under reflux followed by O-deacetylation with NH3 in THF/MeOH, 4,6-O-isopropylidenation with Me3C(OMe)2 in DMF containing pyridinium p-toluenesulfonate, and N-trifluorodeacetylation with 1N aqueous NaOH/EtOH gave I [R1 = allyl, R2 = (3R)-3-benzyloxymyristoyl, R3 = (3R)-3-benzyloxytetradecanoyl, R4 = PhCH2, R5 - R6 = H; R7R8 = CMe2]. N-Acylation of the latter with (3R)-3-dodecanoyloxymyristic acid in the presence of DCC and 4-dimethylaminopyridine followed by O-acylation with (3R)-3-myristoyloxymyristic acid in the presence of DCC, deisopropylidenation, etherification with PhCH2OCH2Cl in refluxing CH2Cl2 containing Me2NCONMe2, and phosphorylation with (PhO)2P(O)Cl in the presence of 4-dimethylaminopyridine in CH2Cl2 gave I [R1-R4 = same as above; R5 = (3R)-3-dodecanoyloxymyristoyl, R6 = (3R)-3-myristoyloxymyristoyl, R7 = P(O)(OPh)2, R8 = CH2OCH2Ph]. Dealkylation of the latter with cyclooctadiene-bis(methyldiphenylphosphine)tridium hexafluorophosphate/I-aqueous pyridine followed by phosphorylation with

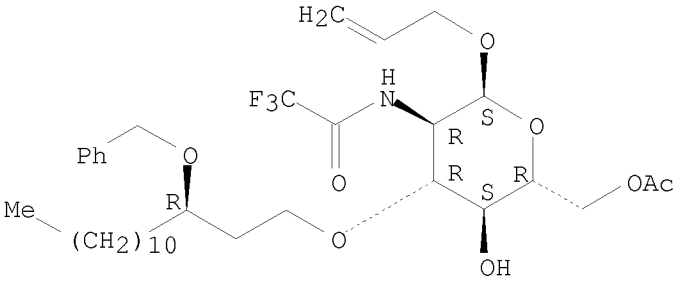
(PhCH2O)2P(O)Cl in the presence of BuLi in THF and hydrogenolysis over 10% Pd/C and then PtO2 in MeOH/THF gave I [R1 = R7 = P(O)(OH)2, R2 = (3R)-3-hydroxymyristoyl, R3 = (3R)-3-hydroxytetradecanoyl, R4 = R8 = H, R5 = (3R)-3-dodecanoyloxymrystoyl, R6 = (3R)-3-myristoyloxymyristoyl].

AN 1991:632768 HCAPLUS <<LOGINID::20081210>>
DN 115:232768
OREF 115:39701a,39704a
TI Preparation of macrophage-activating lipid A 3-ether analogs as antitumor agents
IN Shiosaki, Masao; Ishida, Noboru; Kobayashi, Tomoo; Hiraoka, Tetsuo; Akamatsu, Minoru; Nishijima, Masahiro
PA Sankyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 03135990	A	19910610	JP 1989-273524	19891020 <--
JP 2839916	B2	19981224		
PRAI JP 1989-273524		19891020 <--		

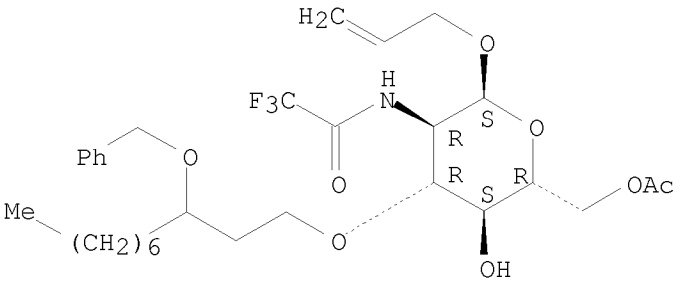
OS MARPAT 115:232768
IT 137014-95-0P 137042-22-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for antitumor lipid A analog)
RN 137014-95-0 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-3-O-[3-(phenylmethoxy)tetradecyl]-2-[(trifluoroacetyl)amino]-, 6-acetate, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

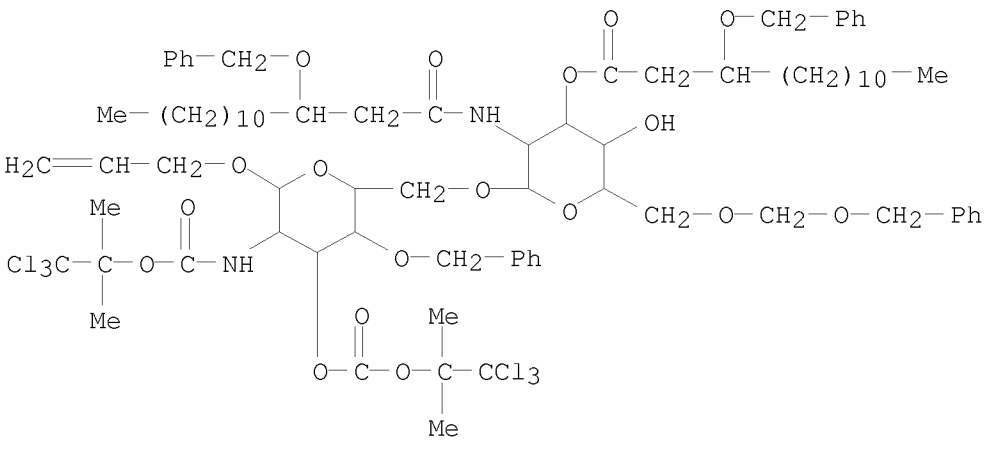


RN 137042-22-9 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-3-O-[3-(phenylmethoxy)decyl]-2-[(trifluoroacetyl)amino]-, 6-acetate (9CI) (CA INDEX NAME)

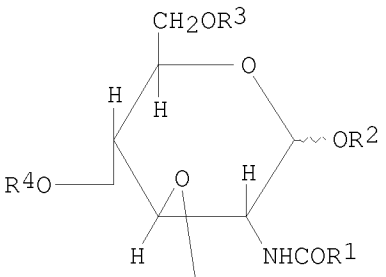
Absolute stereochemistry.



L33 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Lipid A and related compounds. XXIV. Efficient synthesis of several lipid as via common disaccharide intermediates
AB The development of new common disaccharide intermediates bearing 2 amino and 6 hydroxyl groups that are chemical differentiated, and their application to syntheses of several lipids As, is described.
AN 1991:247631 HCAPLUS <<LOGINID::20081210>>
DN 114:247631
OREF 114:41833a,41836a
TI Lipid A and related compounds. XXIV. Efficient synthesis of several lipid as via common disaccharide intermediates
AU Akamatsu, Seijiro; Ikeda, Kiyoshi; Achiwa, Kazuo
CS Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, 422, Japan
SO Chemical & Pharmaceutical Bulletin (1991), 39(2), 288-96
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
OS CASREACT 114:247631
IT 134040-50-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and phosphitylation of)
RN 134040-50-9 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-3-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-β-D-glucopyranosyl]-4-O-(phenylmethyl)-2-[[(2,2,2-trichloro-1,1-dimethylethoxy)carbonyl]amino]-, 3-(2,2,2-trichloro-1,1-dimethylethyl carbonate), [6[2(R),3(R)]]- (9CI) (CA INDEX NAME)



L33 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of dipeptidyl-4-O,6-O-acyl-2-amino-2-deoxy-D-glucose derivatives for use in AIDS-immunocompromised human hosts
GI



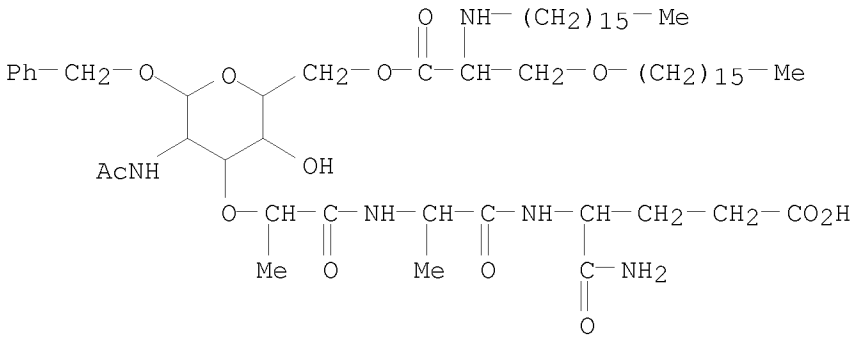
I

AB The title compds. I [R1 = (un)substituted alkyl or Ph, etc.; R2 = H, (un)substituted alkyl, Ph, phenylalkyl, etc.; R3, R4 = R10(CO)rXs(CR11R12)tCO; R5 = H, alkyl; R6 = H, R6R7 = (CH2)3, R7 = H, alkyl, HOCH2, HSCH2, (un)substituted benzyl; R8, R9= CO2H, alkoxycarbonyl, (un)substituted CONH2, etc.; R10 = H, alkyl, alkenyl, alkoxy, Ph, alkylsulfonyl, cholesteryl; X = O, S, SiR13R14; R11-R14 = H, alkyl, alkylcarbonyloxy, etc.; r, s = 0, 1; t = 0-20] are prepared as drugs for enhancing host resistance against opportunistic infections in AIDS patients. Benzyl-2-acetamido-2-deoxy-3-O-(D-2-propionyl-L-alanyl-D-isoglutamine benzyl ester)-α-D-glucopyranoside was treated successively with DMF, behenoyloxyisobutyric acid, CH2Cl2, N,N'-dicyclohexylcarbodiimide, and 4-dimethylaminopyridine to give benzyl-2-acetamido-6-O-behenoyloxyisobutyryl-2-deoxy-3-O-(D-2-propionyl-L-alanyl-D-isoglutamine benzyl ester)-α-D-glucopyranoside, which upon hydrogenolysis over Pd in HOAc gave 2-acetamido-6-O-behenoyloxyisobutyryl-2-deoxy-3-O-(D-2-propionyl-L-alanyl-D-isoglutamine)-D-glucose. I, administered s.c. at 100-300 mg/kg/day for 5 consecutive days, increased the production of antibodies against bovine serum albumin in mice (no specific examples).
AN 1990:112075 HCAPLUS <<LOGINID::20081210>>
DN 112:112075
OREF 112:18799a,18802a
TI Preparation of dipeptidyl-4-O,6-O-acyl-2-amino-2-deoxy-D-glucose derivatives for use in AIDS-immunocompromised human hosts
IN Durette, Philippe L.; Dorn, Conrad P.
PA Merck and Co., Inc., USA
SO U.S., 16 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4868155	A	19890919	US 1987-105055	19871005 <--
PRAI US 1987-105055		19871005 <--		

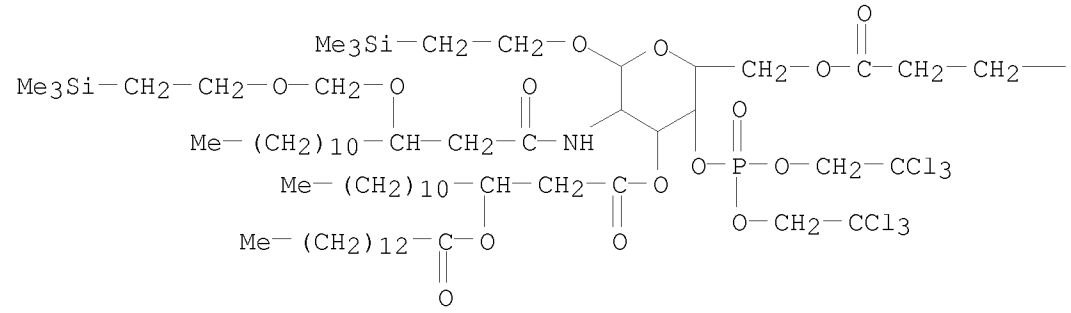
IT 125598-54-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrogenolysis of)
RN 125598-54-1 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-1-O-(phenylmethyl)-α-muramoyl]-L-alanyl]-, 6'-ester with N,O-dihexadecylserine (9CI) (CA INDEX NAME)



L33 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Studies on immunoadjuvant active compounds. Part XXXVII. Synthesis and immunoadjuvant activity of the conjugates of 1-thio-N-acetyl-muramoyl dipeptide with lipid A subunit analogs
AB A variety of immunomodulators were synthesized by combining biol active derivs. of 1-thio-muramoyl dipeptide with 4-O-phosphono-D-glucosamine derivs. related to bacterial lipid A, and using the (succinoylamino)undecanoyl group as a spacer. Their immunoadjuvant activities in guinea-pigs were examined, and the compds. showed strong delayed type of hypersensitivity to N-acetyl-L-tyrosine-3-azobenzene-4'-arsonate, comparable to that of N-acetylmuramoyl dipeptide.
AN 1989:566954 HCAPLUS <<LOGINID::20081210>>
DN 111:166954
OREF 111:27625a,27628a
TI Studies on immunoadjuvant active compounds. Part XXXVII. Synthesis and immunoadjuvant activity of the conjugates of 1-thio-N-acetyl-muramoyl dipeptide with lipid A subunit analogs
AU Ogawa, Yuji; Kitagawa, Masayuki; Fujishima, Yushun; Kiso, Makoto; Hasegawa, Akira; Ishida, Hideharu; Azuma, Ichiro
CS Dep. Appl. Bioorg. Chem., Gifu Univ., Gifu, 501-11, Japan
SO Agricultural and Biological Chemistry (1989), 53(4), 1025-36
CODEN: ABCHA6; ISSN: 0002-1369
DT Journal
LA English
IT 122078-92-6P 122078-93-7P 122078-94-8P
122099-34-7P 122099-35-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and desilylation of)
RN 122078-92-6 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-1-S-acetyl-6-O-[11-[(3-carboxy-1-oxopropyl)amino]-1-oxoundecyl]-1-thio-β-muramoyl]-L-alanyl]-, 5-methyl ester, 6-ester with [2(R),3(R)]-2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-β-D-glucopyranoside 4-[bis(2,2,2-trichloroethyl) phosphate] 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



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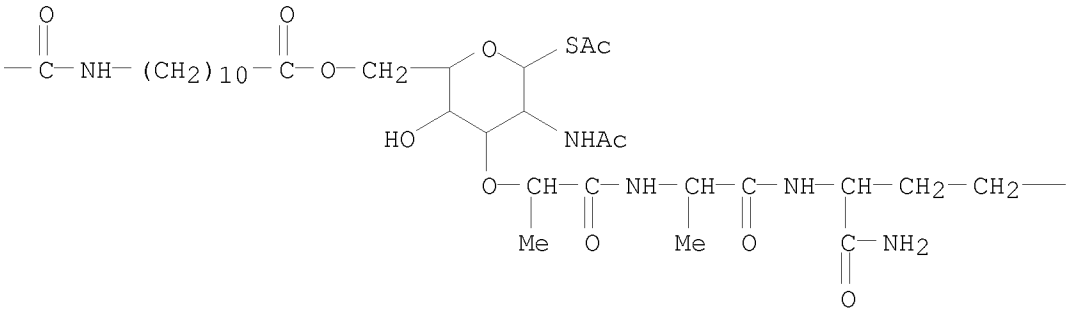

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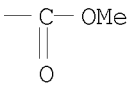
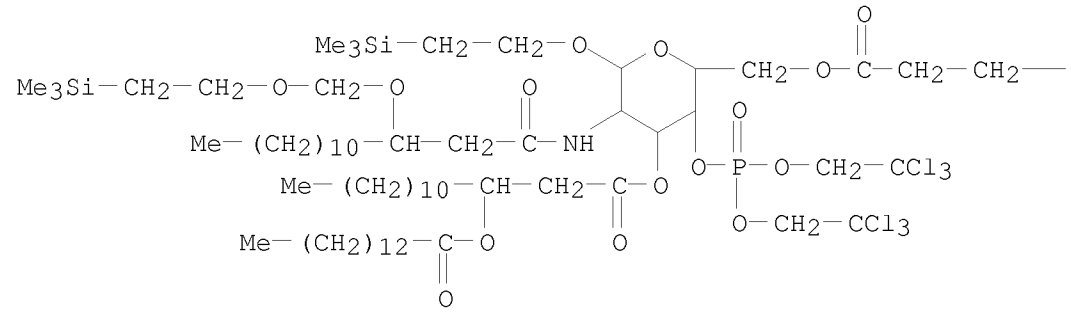


RN 122078-93-7 HCAPLUS

CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-[11-[(3-carboxy-1-oxopropyl)amino]-1-oxoundecyl]-1-S-(1-oxodecyl)-1-thio-β-muramoyl]-L-alanyl]-, 5-methyl ester, 6-ester with [2(R),3(R)]-2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-β-D-glucopyranoside 4-[bis(2,2,2-trichloroethyl) phosphate] 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



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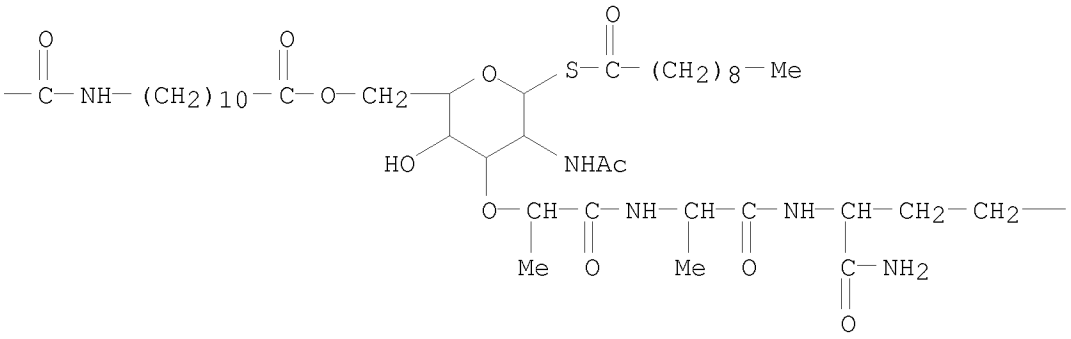

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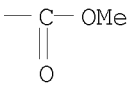
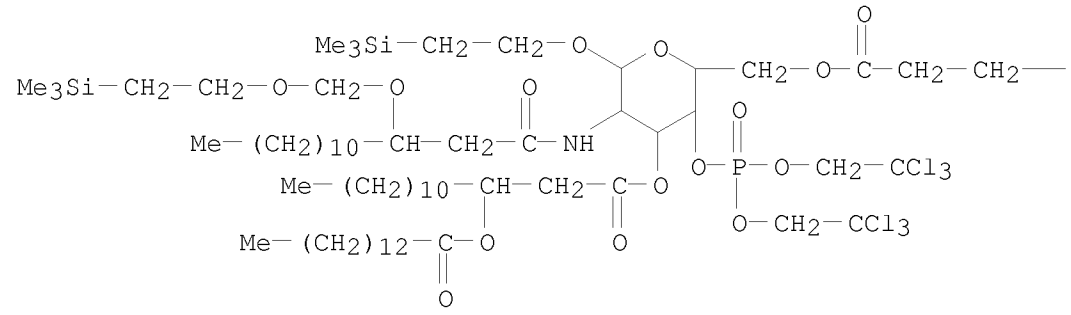


RN 122078-94-8 HCAPLUS

CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-[11-[(3-carboxy-1-oxopropyl)amino]-1-oxoundecyl]-1-S-(1-oxooctadecyl)-1-thio-β-muramoyl]-L-alanyl]-, 5-methyl ester, 6-ester with [2(R),3(R)]-2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-β-D-glucopyranoside 4-[bis(2,2,2-trichloroethyl) phosphate] 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



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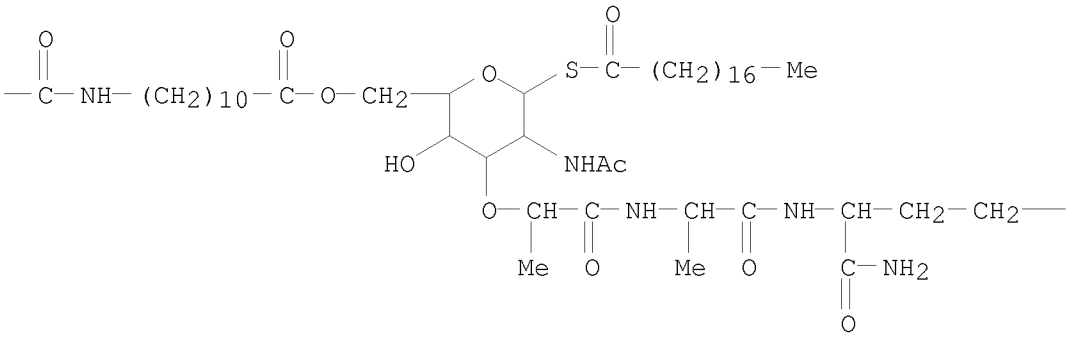

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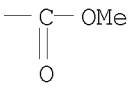
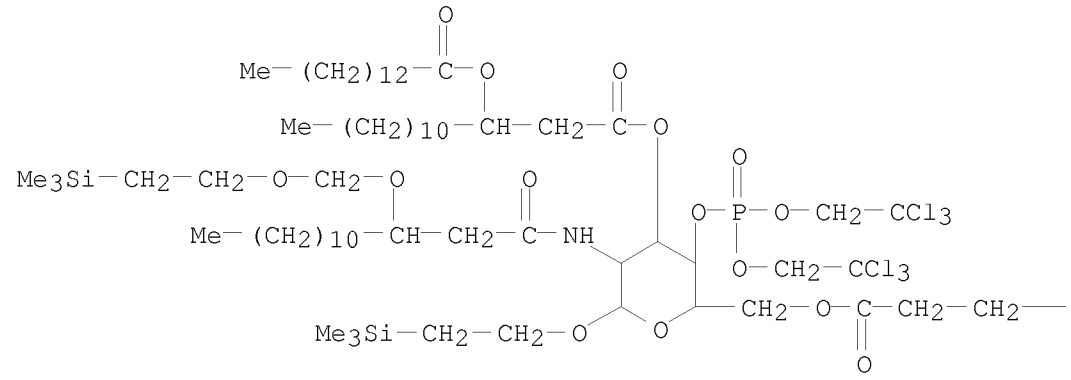


RN 122099-34-7 HCAPLUS

CN D-α-Glutamine, N2-[N-[N-acetyl-1-S-[11-[(3-carboxy-1-oxopropyl)amino]-1-oxoundecyl]-6-O-(1-oxodecyl)-1-thio-β-muramoyl]-L-alanyl]-, 5-methyl ester, 6-ester with [2(R),3(R)]-2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-β-D-glucopyranoside 4-[bis(2,2,2-trichloroethyl) phosphate] 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



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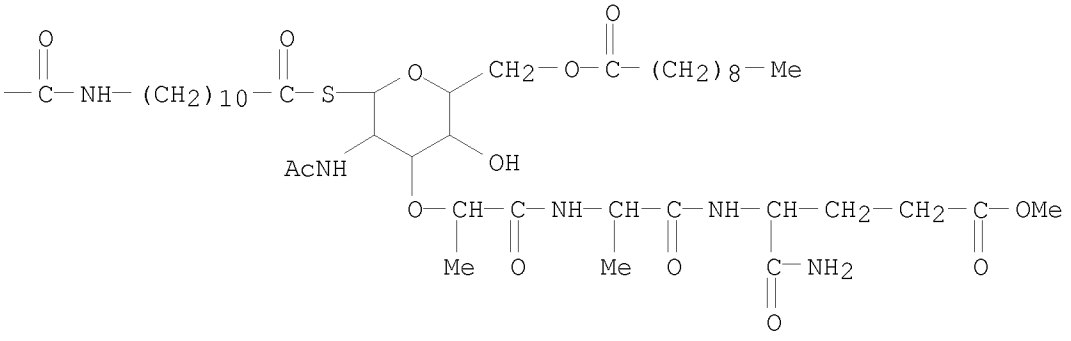
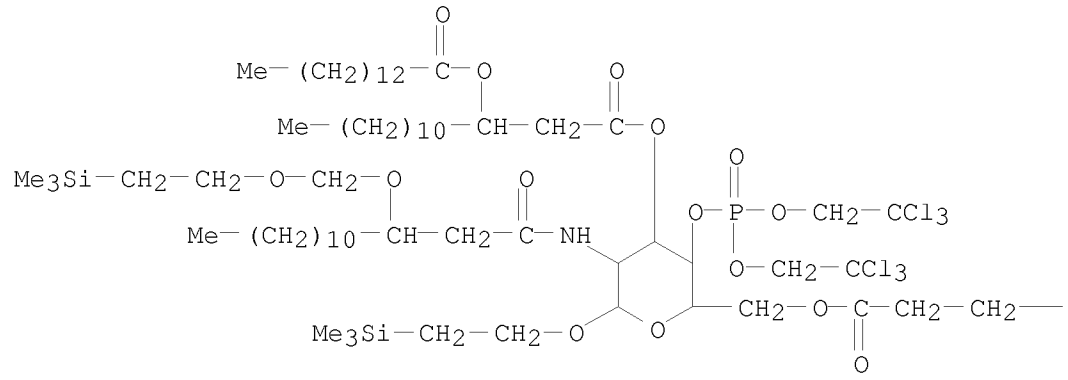


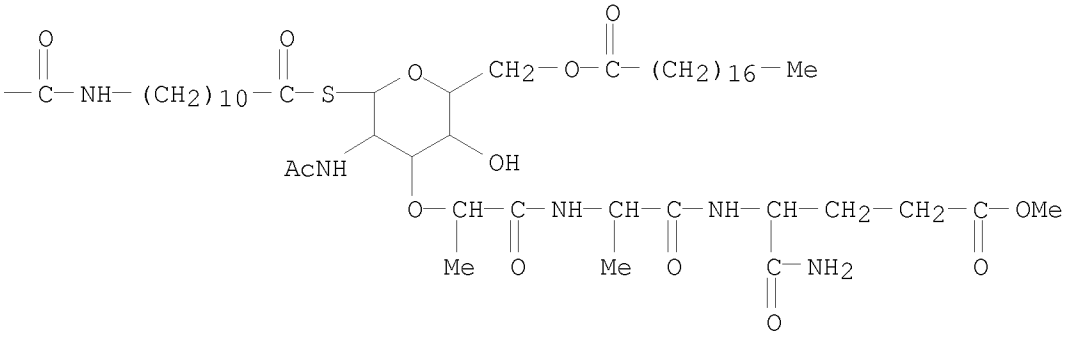
RN 122099-35-8 HCAPLUS

CN D-α-Glutamine, N2-[N-[N-acetyl-1-S-[11-[(3-carboxy-1-oxopropyl)amino]-1-oxoundecyl]-6-O-(1-oxooctadecyl)-1-thio-β-muramoyl]-L-alanyl]-, 5-methyl ester, 6-ester with [2(R),3(R)]-2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[[2-(trimethylsilyl)ethoxy]methoxy]tetradecyl]amino]-β-D-glucopyranoside 4-[bis(2,2,2-trichloroethyl) phosphate] 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L33 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of physiologically active congugates of lipid A nonreducing monosaccharide subunit analogs with 1-thiomuramyl dipeptide derivatives

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title conjugates [I; X = Q, R = R1 = H; l = 8-12; m = 0-22; n = 1-15; provided that the asym. C's at the 3-position of 2- or 3-substituents in the pyranose ring may have S- or R-configuration], having physiol. activity (no data), were prepared Treatment of I (X = OH, OR = β-OCH2CH2SiMe3, R1 = Cl3CCH2; l = 12) (II) (preparation given) with DCC

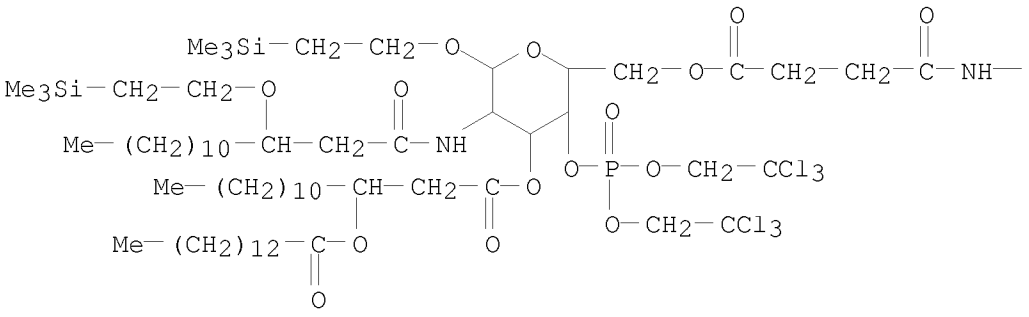
and concentrated H2SO4 in 1,4-dioxane and reaction of the active intermediate with 1-thiomuramyl dipeptide derivative QH·CF3CO2H (m = 0, n = 10) in MeOH/1,4-dioxane containing Et3N gave 42.2% I (X = Q, OR = β-OCH2CH2SiMe3, R1 = CCl3CH2, l = 12, m = 0, n = 10). Deprotection of the latter by treatment with BF3·OEt2 in Cl2H2 to remove Me3SiCH2CH2, followed by Zn powder to remove Cl3CCH2 in AcOH, gave I (X = Q, R = R1 = H, l = 12, m = 0, n = 10).

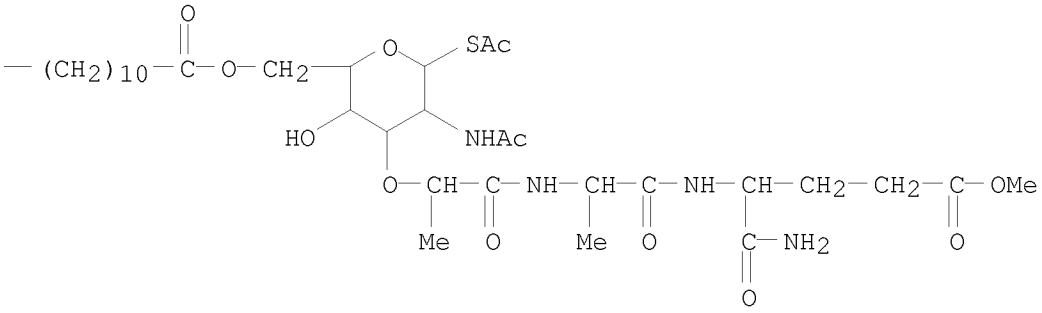
AN 1989:515701 HCAPLUS <<LOGINID::20081210>>
DN 111:115701
OREF 111:19407a,19410a
TI Preparation of physiologically active congugates of lipid A nonreducing monosaccharide subunit analogs with 1-thiomuramyl dipeptide derivatives
IN Hasegawa, Akira; Kiso, Makoto; Morihara, Kazuyuki
PA Toho Pharmaceutical Industries Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01019098	A	19890123	JP 1987-175766	19870714 <--
PRAI JP 1987-175766		19870714 <--		

OS MARPAT 111:115701
IT 122266-80-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)
RN 122266-80-2 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-1-S-acetyl-6-O-[11-[(3-carboxy-1-oxopropyl)amino]-1-oxoundecyl]-1-thio-β-muramoyl]-L-alanyl]-, 1-methyl ester, 6-ester with 2-(trimethylsilyl)ethyl 2-deoxy-2-[[1-oxo-3-[2-(trimethylsilyl)ethoxy]tetradecyl]amino]-β-D-glucopyranoside 4-[bis(2,2,2-trichloroethyl) phosphate] 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [R-(R*,R*)]- (9CI) (CA INDEX NAME)

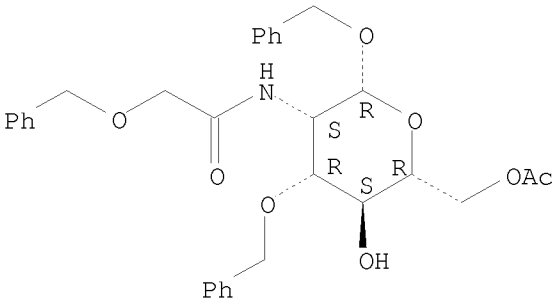
PAGE 1-A





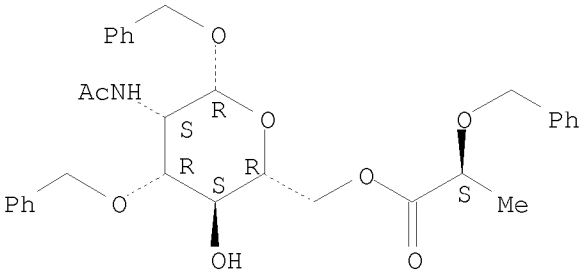
L33 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of six naturally occurring sialic acids with immobilized acylneuraminate pyruvate lyase
AB Acylneuraminate pyruvate lyase immobilized on agarose was stable for several months at 4° in buffer, and the same sample could be used up to ten times in the preparation of sialic acids from the corresponding mannosamines and pyruvate. Six naturally occurring sialic acids, Neu5Ac, Neu5,9Ac2, Neu5Ac9Lac, Neu5Gc, Neu9Ac5Gc and the 2-acetoxyacetamido derivative were thus obtained, in multigram quantities when needed. 2-Acetamido-2-deoxy-5-O-methyl-D-mannose gave only traces of Neu5Ac8Me, one of the starfish sialic acids, but other methylated derivs., Neu5Ac7Me and Neu5Ac9Me were readily obtained. This indicated a specific sensitivity of the enzyme to 8-O-substitution on sialic acid or 5-O-substitution on N-acetylmannosamine. Also reported are inexpensive chemical routes to the substrates, which avoid the use of costly mannosamine as starting material.
AN 1989:423846 HCAPLUS <<LOGINID::20081210>>
DN 111:23846
OREF 111:4165a,4168a
TI Preparation of six naturally occurring sialic acids with immobilized acylneuraminate pyruvate lyase
AU Auge, Claudine; David, Serge; Gautheron, Christine; Malleron, Annie; Cavaye, Bertrand
CS Inst. Chim. Mol., Univ. Paris Sud, Orsay, 91405, Fr.
SO New Journal of Chemistry (1988), 12(8-9), 733-44
CODEN: NJCHE5; ISSN: 1144-0546
DT Journal
LA English
OS CASREACT 111:23846
IT 119870-61-0P 119887-65-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenolysis of)
RN 119870-61-0 HCAPLUS
CN β-D-Mannopyranoside, phenylmethyl 2-deoxy-2-[[(phenylmethoxy)acetyl]amino]-3-O-(phenylmethyl)-, 6-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

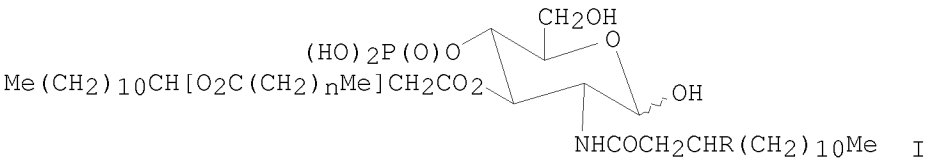


RN 119887-65-9 HCAPLUS
CN β-D-Mannopyranoside, phenylmethyl
2-(acetylamino)-2-deoxy-3-O-(phenylmethyl)-,
6-[2-(phenylmethoxy)propanoate], (S)- (9CI) (CA INDEX NAME)

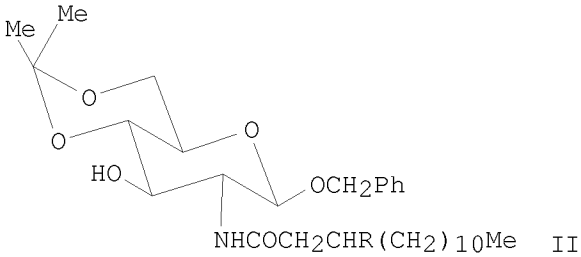
Absolute stereochemistry.



L33 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Nonreducing sugar subunit analogs of bacterial lipid A carrying the ester bound (3R)-3-(acyloxy)tetradecanoyl group
GI



I



II

AB In order to elucidate further the relationship between the composition of the fatty acyl groups in the nonreducing-sugar subunit of bacterial lipid A and its biol. activity, analogs (R,R)-I (n = 10, 14, R = OH) and (R)-I (n = 10, 12, 14, R = H) have been synthesized. Isopropylidene-β-D-glucopyranosides II (R = H, OCH2OCH2Ph) were each esterified with (3R)-Me(CH2)10CH[O2C(CH2n)Me]CH2CO2H followed by deisopropylidenation, 6-O-tritylation and 4-O-phosphorylation, to give I.

AN 1988:631430 HCAPLUS <<LOGINID::20081210>>

DN 109:231430

OREF 109:38297a,38300a

TI Nonreducing sugar subunit analogs of bacterial lipid A carrying the ester bound (3R)-3-(acyloxy)tetradecanoyl group

AU Kiso, Makoto; Ogawa, Yuji; Fujishima, Yushun; Fujita, Minoru; Tanaka, Shinji; Hasegawa, Akira

CS Dep. Agric. Chem., Gifu Univ., Gifu, 501-11, Japan

SO Journal of Carbohydrate Chemistry (1987), 6(4), 625-38
CODEN: JCACDM; ISSN: 0732-8303

DT Journal

LA English

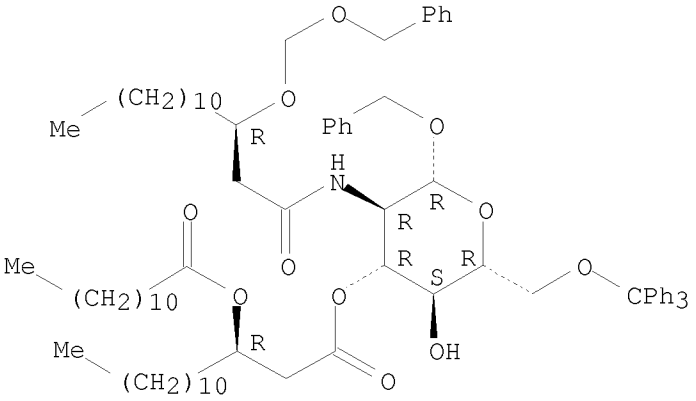
OS CASREACT 109:231430

IT 117639-30-2P 117639-33-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of)

RN 117639-30-2 HCAPLUS

CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-2-[[1-oxo-3-[(phenylmethoxy)methoxy]tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxododecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

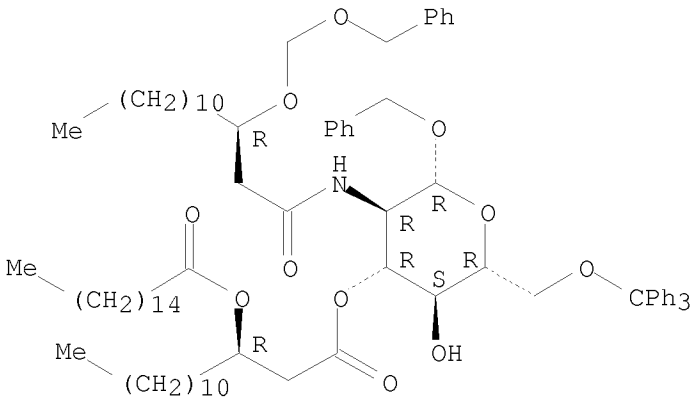
Absolute stereochemistry.



RN 117639-33-5 HCAPLUS

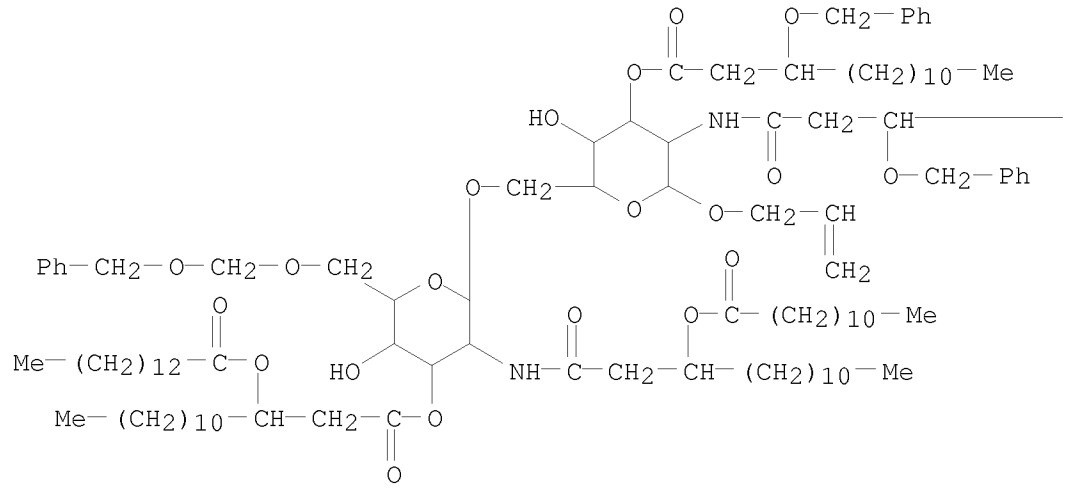
CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-2-[[1-oxo-3-[(phenylmethoxy)methoxy]tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxohexadecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Total synthesis of Escherichia coli lipid A, the endotoxically active principle of cell-surface lipopolysaccharide
GI For diagram(s), see printed CA Issue.
AB Chemical syntheses are described of polyacylated β(1→6) glucosamine disaccharide 1,4'-diphosphates I [R = R4 = P(O)(OH)2; throughout the abstract R1 = (R)-3-(tetradecanoyloxy)tetradecanoyl, R2 = (R)-3-(dodecanoyloxy)tetradecanoyl, R3 = (R)-3-hydroxytetradecanoyl; II], which correspond to the proposed structure of E. coli lipid A, and of their dephospho derivs. [I; R = P(O)(OH)2, R4 = H; R = H, R4 = P(O)(OH)2; R = R4 = H]. II proved to be identical with the natural specimen. The chemical structure of lipid A was thus established.
AN 1988:204945 HCAPLUS <<LOGINID::20081210>>
DN 108:204945
OREF 108:33693a,33696a
TI Total synthesis of Escherichia coli lipid A, the endotoxically active principle of cell-surface lipopolysaccharide
AU Imoto, Mashiro; Yoshimura, Hiroyuki; Shimamoto, Tetsuo; Sakaguchi, Nobuki; Kusumoto, Shoichi; Shiba, Tetsuo
CS Fac. Sci., Osaka Univ., Toyonaka, 560, Japan
SO Bulletin of the Chemical Society of Japan (1987), 60(6), 2205-14
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
OS CASREACT 108:204945
IT 114360-75-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deallylation of)
RN 114360-75-7 HCAPLUS
CN α-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-[(1-oxododecyl)oxy]tetradecyl]amino]-3-O-[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]-6-O-[(phenylmethoxy)methyl]-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3-[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),6[2(R),3(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A

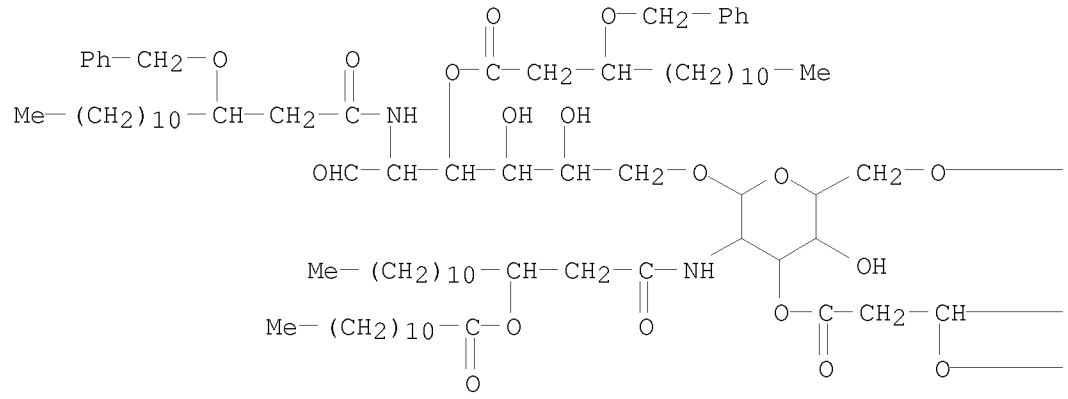


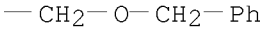
PAGE 1-B

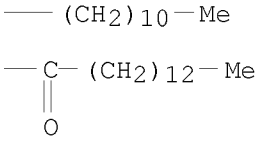
— $(CH_2)_{10}$ — Me

IT 114360-76-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of, with dibenzyl phosphorochloridate)
RN 114360-76-8 HCAPLUS
CN D-Glucose, 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-[(1-oxododecyl)oxy]tetradecyl]amino]-3-O-[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]-6-O-[(phenylmethoxy)methyl]-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3-[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),6[2(R),3(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



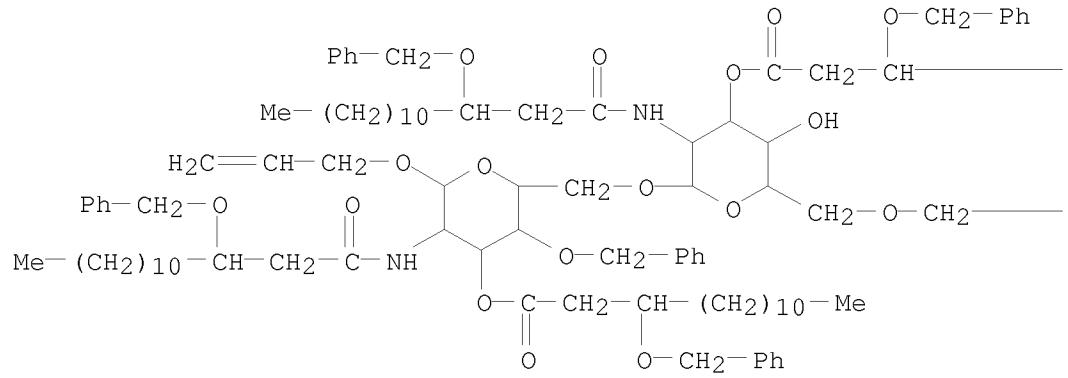




L33 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Chemical synthesis of a biosynthetic precursor of lipid A with a phosphorylated tetraacyl disaccharide structure
GI For diagram(s), see printed CA Issue.
AB Glucosamine disaccharide diphosphate [I; R = (R)-3-hydroxytetradecanoyl throughout; R1 = R2 = P(O)(OH)2] was prepared via preparation of the β-(1→6)-disaccharide without long chain acyl groups, introduction of 3-(benzyloxy)tetradecanoyl groups onto the 2 amino and 2 OH groups, phosphorylation of the 4'-position, phosphorylation of the glycosidic position, and hydrogenolytic deprotection. The monophosphates I [R1 = P(O)(OH)2, R2 = H; R1 = H, R2 = P(O)(OH)2] and the dephospho derivative I (R1 = R2 = H) were prepared by slight modification of the above synthetic route. The diphosphate prepared was identical with a natural biosynthetic precursor of lipid A which corresponds to the lipophilic part of the lipopolysaccharide (LPS) in the bacterial cell wall. The synthetic di- and monophosphates exhibited many of the typical endotoxic activities of LPS. This established the chemical structure of the biosynthetic precursor of lipid A and elucidated the fundamental structure required for the expression of these activities.
AN 1988:204944 HCAPLUS <<LOGINID::20081210>>
DN 108:204944
OREF 108:33693a,33696a
TI Chemical synthesis of a biosynthetic precursor of lipid A with a phosphorylated tetraacyl disaccharide structure
AU Imoto, Masahiro; Yoshimura, Hiroyuki; Yamamoto, Michiharu; Shimamoto, Tetsuo; Kusumoto, Shoichi; Shiba, Tetsuo
CS Fac. Sci., Osaka Univ., Toyonaka, 560, Japan
SO Bulletin of the Chemical Society of Japan (1987), 60(6), 2197-204
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
OS CASREACT 108:204944
IT 92949-59-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of, with di-Ph phosphorochloridate)
RN 92949-59-2 HCAPLUS

CN β-D-Glucopyranoside, 2-propenyl
2-deoxy-6-O-[2-deoxy-3-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-4-O-(phenylmethyl)-, 3-[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),6[2(R),3(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



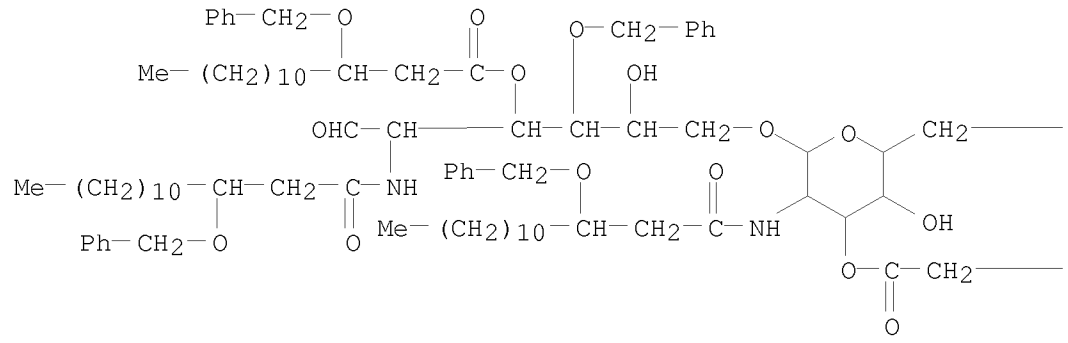
PAGE 1-B

— $(CH_2)_{10}$ — Me

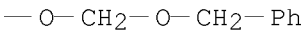
——— O — CH_2 — Ph

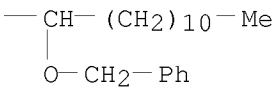
IT 92949-60-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of, with dibenzyl phosphorochloridate)
RN 92949-60-5 HCAPLUS
CN D-Glucose, 2-deoxy-6-O-[2-deoxy-3-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-4-O-(phenylmethyl)-, 3-[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),6[2(R),3(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

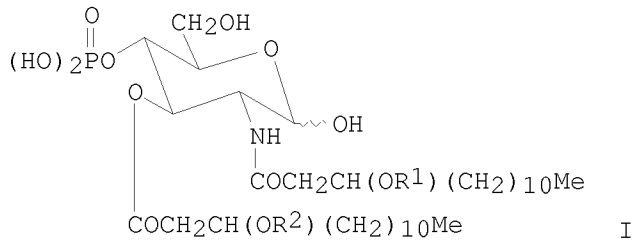




L33 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Synthesis of the optically active 4-O-phosphono-D-glucosamine derivatives related to the nonreducing sugar subunit of bacterial lipid A

GI



I

AB The optically active lipid A-subunit homologs named GLA-46, GLA-47, GLA-59, and GLA-60 [I; R1 = R2 = H; R1 = R2 = myristoyl; R1 = myristoyl, R2 = H; R1 = H, R2 = myristoyl; resp.] were prepared stepwise by successive acylation at N-2 and O-3 of benzyl

2-amino-2-deoxy-4,6-O-isopropylidene-β-D-glucopyranoside with the 3-O-(benzyloxy)methyl or 3-O-tetradecanoyl derivative of optically active 3-hydroxytetradecanoic acid, and phosphorylation at O-4 of the D-glucosamine residue.

AN 1988:75749 HCAPLUS <<LOGINID::20081210>>

DN 108:75749

OREF 108:12551a,12554a

TI Synthesis of the optically active 4-O-phosphono-D-glucosamine derivatives related to the nonreducing sugar subunit of bacterial lipid A

AU Kiso, Makoto; Tanaka, Shinji; Fujita, Minoru; Fujishima, Yushun; Ogawa, Yuji; Ishida, Hideharu; Hasegawa, Akira

CS Dep. Agric. Chem., Gifu Univ., Gifu, 501-11, Japan

SO Carbohydrate Research (1987), 162(1), 127-40
CODEN: CRBRAT; ISSN: 0008-6215

DT Journal

LA English

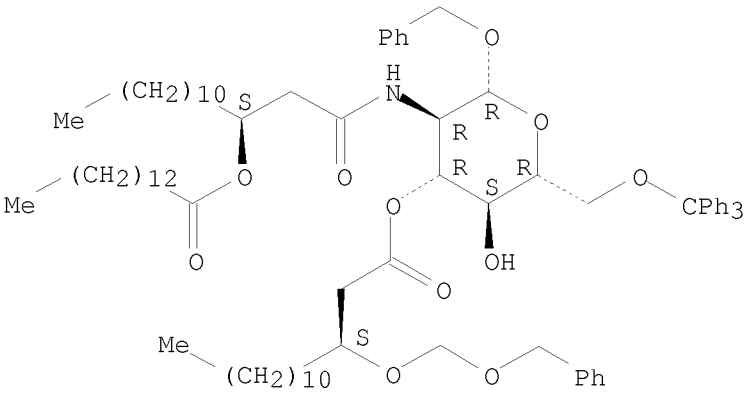
OS CASREACT 108:75749

IT 111247-18-8P 111247-27-9P 112475-24-8P
112475-28-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of)

RN 111247-18-8 HCAPLUS

CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(phenylmethoxy)methoxy]tetradecanoate], [2(S),3(S)]- (9CI) (CA INDEX NAME)

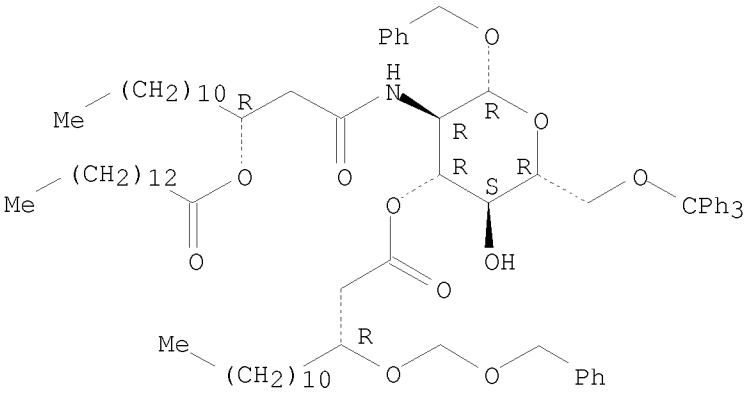
Absolute stereochemistry.



RN 111247-27-9 HCAPLUS

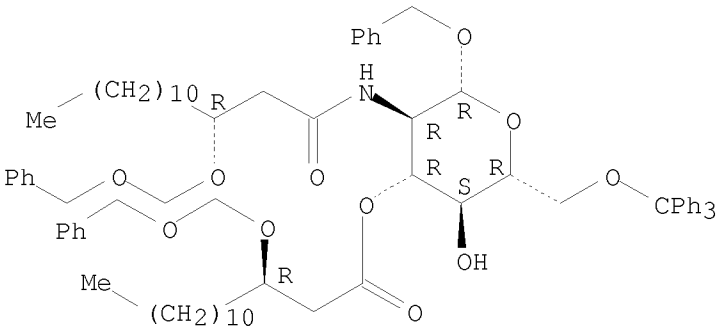
CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(phenylmethoxy)methoxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



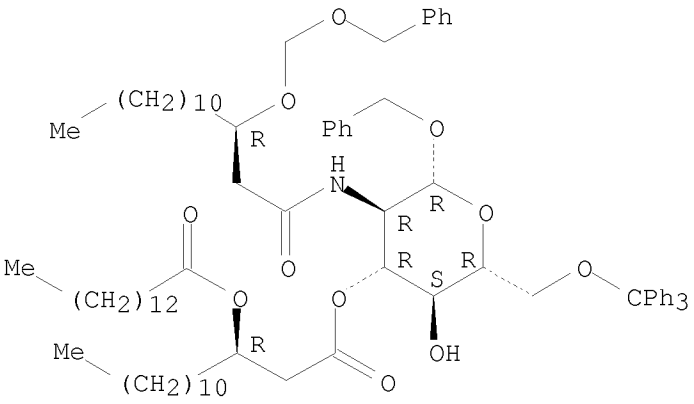
RN 112475-24-8 HCAPLUS
CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-2-[[1-oxo-3-[(phenylmethoxy)methoxy]tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(phenylmethoxy)methoxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

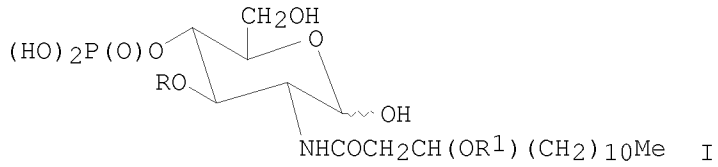


RN 112475-28-2 HCAPLUS
CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-2-[[1-oxo-3-[(phenylmethoxy)methoxy]tetradecyl]amino]-6-O-(triphenylmethyl)-, 3-[3-[(1-oxotetradecyl)oxy]tetradecanoate], [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



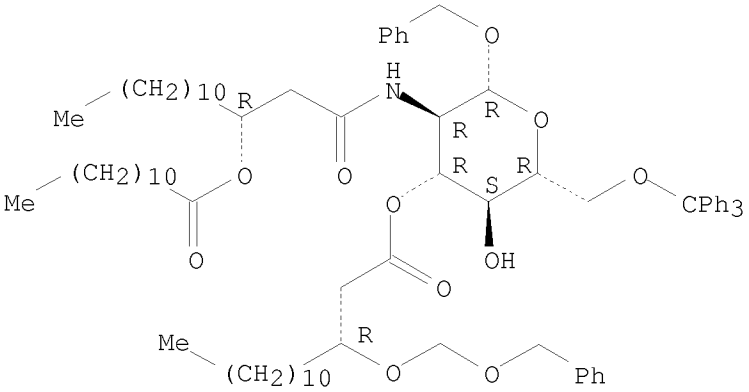
L33 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis of the nonreducing-sugar subunit analogs of bacterial lipid A carrying the amide-bound (3R)-3-(acyloxy)tetradecanoyl group
GI



AB Two types of the optically active, 4-O-phosphono-D-glucosamine derivs. related to the nonreducing-sugar subunit of bacterial lipid A, one being GLA-57 [I; R = Me(CH2)12CO, R1 = Me(CH2)10CO] and GLA-58 [I; R = Me(CH2)12CO, R1 = Me(CH2)14CO], and the other GLA-61 [I; R = Me(CH2)10CH(OH)CH2CO, R1 = Me(CH2)10CO) and GLA-62 [I; R = Me(CH2)10CH(OH)CH2CO, R1 = Me(CH2)14CO] were prepared The NH2 group of benzyl 2-amino-2-deoxy-4,6-O-isopropylidene-β-D-glucopyranoside was first acylated with the (3R)-3-dodecanoyloxytetradecanoyl or (3R)-3-hexadecanoyloxytetradecanoyl group, and then the remaining HO group was esterified with the tetradecanoyl or (3R)-3-(benzyloxymethoxy)tetradecanoyl group, resp. The resulting protected intermediates were each converted, by the sequence of O-deisopropylidenation, 6-O-tritylation, and 4-O-phosphorylation, into I.
AN 1988:38248 HCAPLUS <<LOGINID::20081210>>
DN 108:38248
OREF 108:6415a,6418a
TI Synthesis of the nonreducing-sugar subunit analogs of bacterial lipid A carrying the amide-bound (3R)-3-(acyloxy)tetradecanoyl group
AU Kiso, Makoto; Tanaka, Shinji; Fujita, Minoru; Fujishima, Yushun; Ogawa, Yuji; Hasegawa, Akira
CS Dep. Agric. Chem., Gifu Univ., Gifu, 501-11, Japan
SO Carbohydrate Research (1987), 162(2), 247-56
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English

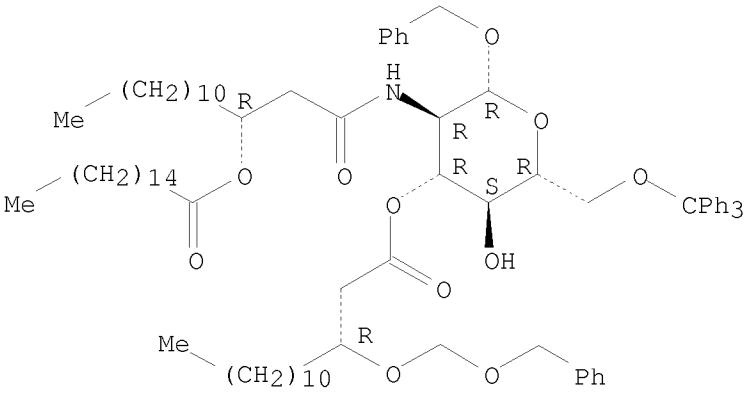
OS CASREACT 108:38248
IT 112166-26-4P 112166-29-7P
    RL: SPN (Synthetic preparation); PREP (Preparation)
    (preparation, phosphorylation and detritylation of)
RN 112166-26-4 HCAPLUS
CN β-D-Glucopyranoside, phenylmethyl
    2-deoxy-2-[[1-oxo-3-[(1-oxododecyl)oxy]tetradecyl]amino]-6-O-
    (triphenylmethyl)-, 3-[3-[(phenylmethoxy)methoxy]tetradecanoate],
    [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

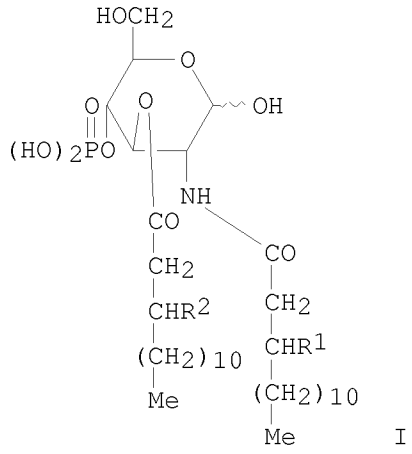


RN 112166-29-7 HCAPLUS
CN β-D-Glucopyranoside, phenylmethyl
    2-deoxy-2-[[1-oxo-3-[(1-oxohexadecyl)oxy]tetradecyl]amino]-6-O-
    (triphenylmethyl)-, 3-[3-[(phenylmethoxy)methoxy]tetradecanoate],
    [2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of biologically active analogs of the nonreducing
    monosaccharide moiety of lipid A
GI



I

AB The title glucosamine derivs. [I; R1 = H, OH, O2C(CH2)12Me; R2 = OH, O2C(CH2)12Me], which exhibit higher biol. and immunol. activities than natural lipid A and are useful as mitogens and immunol. adjuvants, were prepared N- And O-acylation of benzyl 2-amino-2-deoxy-4,6-isopropylidene-β-D-glucopyranoside with (3R)-3-(tetradecanoyloxy)tetradecanoic acid was conducted stepwise, first in the presence of 1,3-dicyclohexyldiimide (DCC) and second using DCC and 4-(dimethylamino)pyridine (DMAP) to give benzyl 2-deoxy-2-[(3)-3-(tetradecanoyloxy)tetradecanamido]-3-O-[(3R)-3-(tetradecanoyloxy)tetradecanoyl]-β-D-glucopyranoside which was subjected to deacetonation in 80% aqueous AcOH, 6-O-tritylation by trityl chloride, esterification with (PhO)2P(O)OH in the presence of DMAP in pyridine, detritylation with HBF4 followed by successive hydrogenolysis over Pd black and PtO2 to give I [R1 = R2 = 3(R)-3-tetradecanoyl].

AN 1987:637220 HCAPLUS <<LOGINID::20081210>>
DN 107:237220
OREF 107:38133a,38136a

TI Preparation of biologically active analogs of the nonreducing monosaccharide moiety of lipid A

IN Hasegawa, Akira; Kiso, Makoto; Morihara, Kazuyuki
PA Toho Pharmaceutical Industries Co., Ltd., Japan

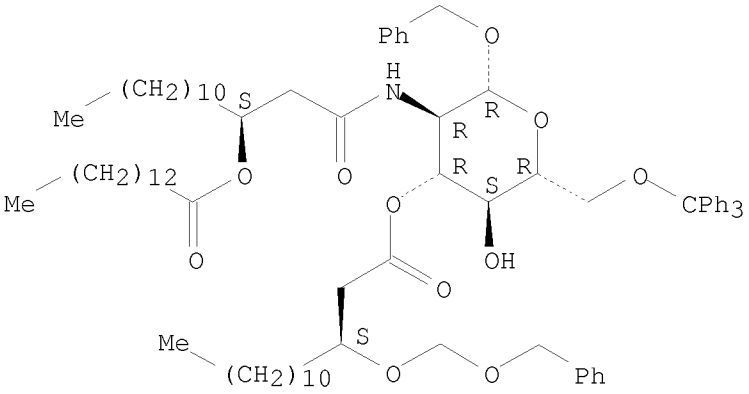
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 224260	A2	19870603	EP 1986-116474	19861127 <--
	EP 224260	A3	19880406		
	R: CH, DE, FR, GB, IT, LI, NL, SE				
	JP 62129292	A	19870611	JP 1985-268802	19851128 <--
	JP 63030495	A	19880209	JP 1986-174436	19860724 <--
	JP 63044588	A	19880225	JP 1986-188215	19860811 <--
	US 4746742	A	19880524	US 1986-930361	19861112 <--
PRAI	JP 1985-268802	A	19851128 <--		
	JP 1986-174436	A	19860724 <--		
	JP 1986-188215	A	19860811 <--		

OS CASREACT 107:237220; MARPAT 107:237220

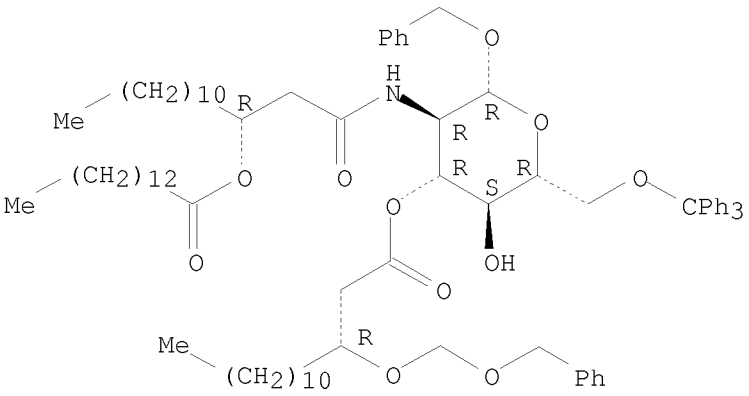
IT 111247-18-8P 111247-27-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of)
RN 111247-18-8 HCAPLUS
CN β-D-Glucopyranoside, phenylmethyl
2-deoxy-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-
(triphenylmethyl)-, 3-[3-[(phenylmethoxy)methoxy]tetradecanoate],
[2(S),3(S)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 111247-27-9 HCAPLUS
CN β-D-Glucopyranoside, phenylmethyl
2-deoxy-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-
(triphenylmethyl)-, 3-[3-[(phenylmethoxy)methoxy]tetradecanoate],
[2(R),3(R)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

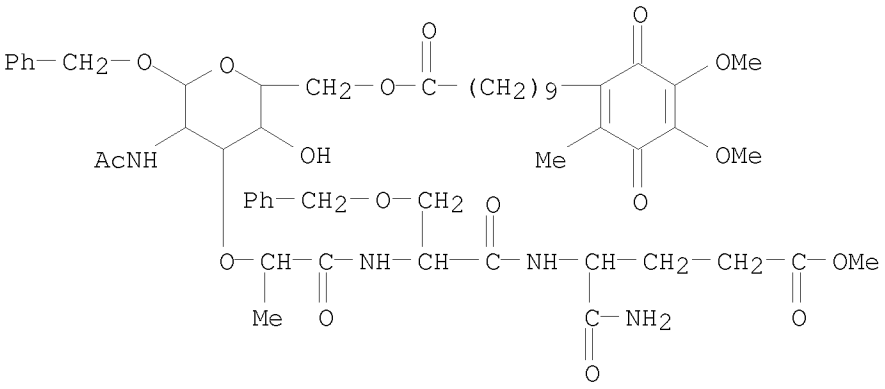


L33 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis and the adjuvant and tumor-suppressive activities of quinonyl
muramyl dipeptides
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

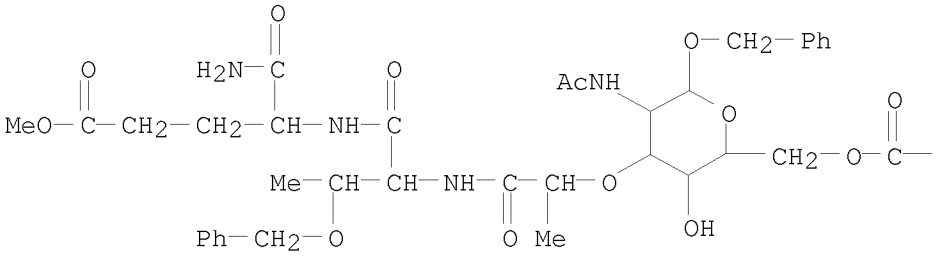
AB Title compds. I (n = 9; X = Val, R = Me, Et, CHMe2, CMe3, n-hexyl, stearyl; X = Ser, Thr, R = Me) were prepared by coupling acid II to the 6-O-position of muramyl dipeptides III [R = same; X = Val, Ser(CH2Ph), Thr(CH2Ph)] by the DCC or active ester method, deblocking the resulting products by hydrogenolysis, and oxidizing the resulting hydroquinone derivs. by FeCl3. R1-X-D-Glu(OR)-NH2 [X = Val, Ser(CH2Ph), Thr(CH2Ph); R = same; R1 = Me3CO2C, PhCH2O2C] were N-deblocked and then condensed with muramic acid IV (NB = 5-norbornene-2,3-dicarboximido) to give the protected glycopeptides, which were cleaved at the 4,6-O-benzylidene group by hot 75% HOAc to give III. Muramyl dipeptides I (n = 2, 5, 15, 21; X = Val; R = Me), V [X1 = Val, R2 = quinonylmycoloyl (Qmy), stearyl; R3 = Me; X1 = Ala, R2 = Qmy, R3 = H], and VI [X2 = Gly, Leu, NH(CH2)pCO (p = 5, 10)] were also prepared All the above muramyl dipeptides retained immune adjuvant activity, but the potent tumor-suppressive activity was observed only in quinonylmuramyl dipeptides, indicating that the 5,6-dimethoxy-3-methyl-1,4-benzoquinone ring is required for antitumor activity. The lipophilicity-hydrophilicity balance of the mol. is also important.

AN 1985:185466 HCAPLUS <<LOGINID::20081210>>
DN 102:185466
OREF 102:29113a,29116a
TI Synthesis and the adjuvant and tumor-suppressive activities of quinonyl muramyl dipeptides
AU Kobayashi, Shigeru; Fukuda, Tsunehiko; Yukimasa, Hidefumi; Fujino, Masahiko; Azuma, Ichiro; Yamamura, Yuichi
CS Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, 532, Japan
SO Bulletin of the Chemical Society of Japan (1984), 57(11), 3182-96
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
IT 77290-25-6P 77290-27-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)
RN 77290-25-6 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-[10-(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)-1-oxodecyl]-1-O-(phenylmethyl)-α-muramoyl]-O-(phenylmethyl)-L-seryl]-, methyl ester (9CI) (CA INDEX NAME)

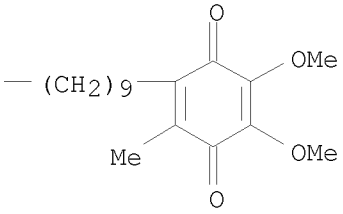


RN 77290-27-8 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-[10-(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)-1-oxodecyl]-1-O-(phenylmethyl)-α-muramoyl]-O-(phenylmethyl)-L-threonyl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



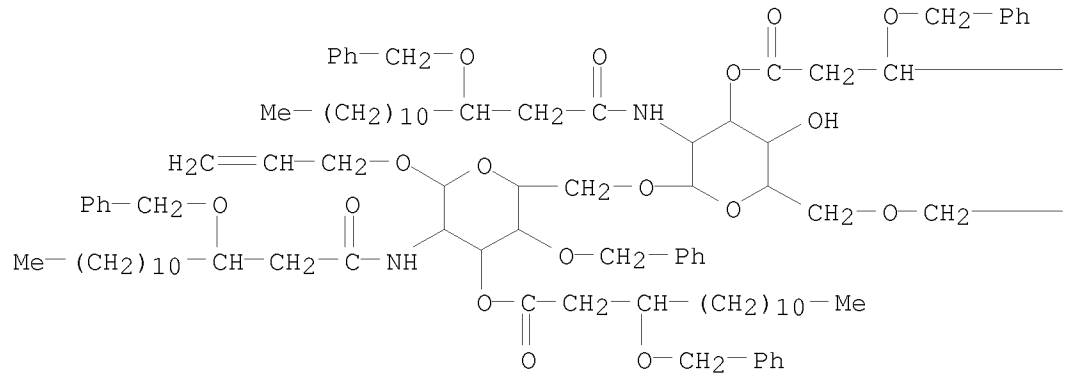
PAGE 1-B



L33 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Chemical synthesis of phosphorylated tetraacyl disaccharide corresponding to a biosynthetic precursor of lipid A
GI For diagram(s), see printed CA Issue.
AB A total synthesis of glucosamine disaccharide 1,4'-diphosphate I [RCO = Me(CH2)10CH(OH)CH2CO] is described. This if the 1st confirmation of the fundamental structure of lipid A since the synthetic compound exhibited most of the characteristic biol. activities of natural endotoxin.
AN 1984:611613 HCAPLUS <<LOGINID::20081210>>
DN 101:211613
OREF 101:32079a,32082a
TI Chemical synthesis of phosphorylated tetraacyl disaccharide corresponding to a biosynthetic precursor of lipid A
AU Imoto, M.; Yoshimura, H.; Yamamoto, M.; Shimamoto, T.; Kusumoto, S.; Shiba, T.
CS Fac. Sci., Osaka Univ., Toyonaka, 560, Japan
SO Tetrahedron Letters (1984), 25(25), 2667-70
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
IT 92949-59-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deallylation of)
RN 92949-59-2 HCAPLUS

CN β-D-Glucopyranoside, 2-propenyl
2-deoxy-6-O-[2-deoxy-3-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-4-O-(phenylmethyl)-, 3-[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),6[2(R),3(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



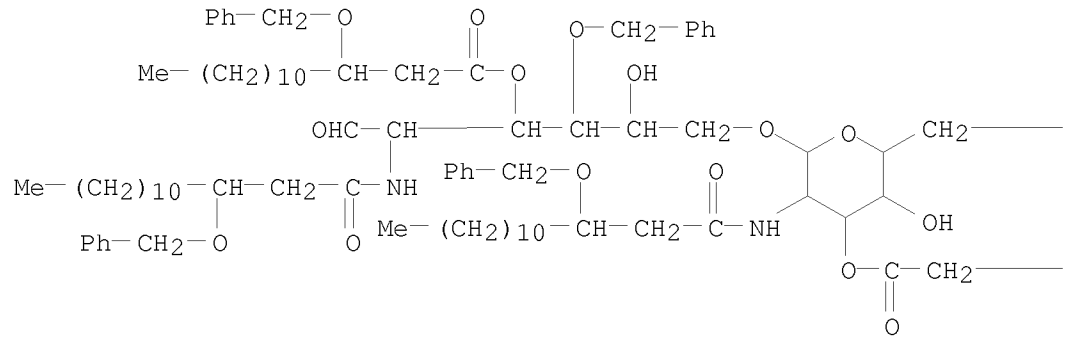
PAGE 1-B

— $(CH_2)_{10}$ — Me

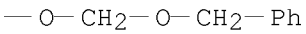
——— O — CH_2 — Ph

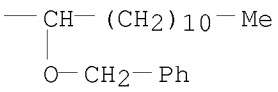
IT 92949-60-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of)
RN 92949-60-5 HCAPLUS
CN D-Glucose, 2-deoxy-6-O-[2-deoxy-3-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-[(phenylmethoxy)methyl]-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-4-O-(phenylmethyl)-, 3-[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),6[2(R),3(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B





L33 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Disaccharides
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

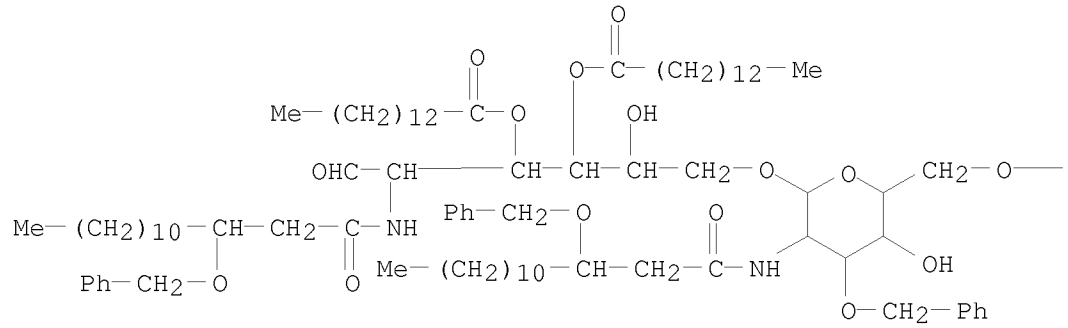
AB Disaccharides I (R1CO = fatty acid acyl group, R2CO = fatty acid acyl group, R3,R4 = H or phosphate group), useful as mitogens for stimulation of mouse lymphocytes, were prepared Thus, disaccharide II was converted in 6 steps to III [R1CO = tetradecanoyl, R2CO = 3-(R)-(benzyloxy)tetradecanoyl] which was deprotected and phosphorylated to give I (R1CO = tetradecanoyl, R2CO = 3-hydroxytetradecanoyl, R3 = H, R4 = dihydrogen phosphate). The latter stimulated cultured mouse lymphocytes 2.0 ± 0.2 at 100 μg/mL.
AN 1984:571657 HCAPLUS <<LOGINID::20081210>>
DN 101:171657
OREF 101:25975a,25978a
TI Disaccharides
PA Daiichi Kogyo Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

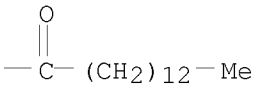
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59048497	A	19840319	JP 1982-159174	19820913 <--
	JP 02011597	B	19900314		
PRAI	JP 1982-159174		19820913 <--		

IT 88862-35-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and removal of benzyloxy groups from)
RN 88862-35-5 HCAPLUS
CN D-Glucose, 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(1-oxotetradecyl)-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3,4-ditetradecanoate, [2(R),6(R)]- (9CI) (CA INDEX NAME)

PAGE 1-A

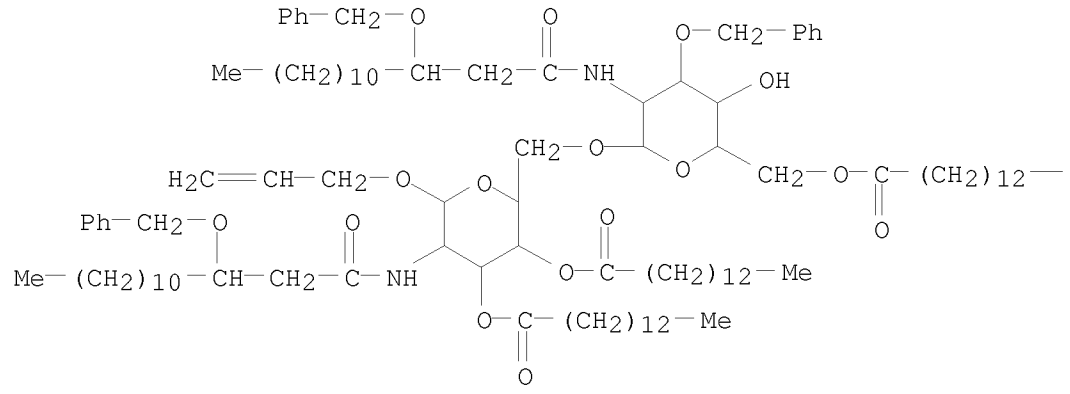


PAGE 1-B



IT 88862-34-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 88862-34-4 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(1-oxotetradecyl)-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3,4-ditetradecanoate, [2(R),6(R)]- (9CI) (CA INDEX NAME)

PAGE 1-A



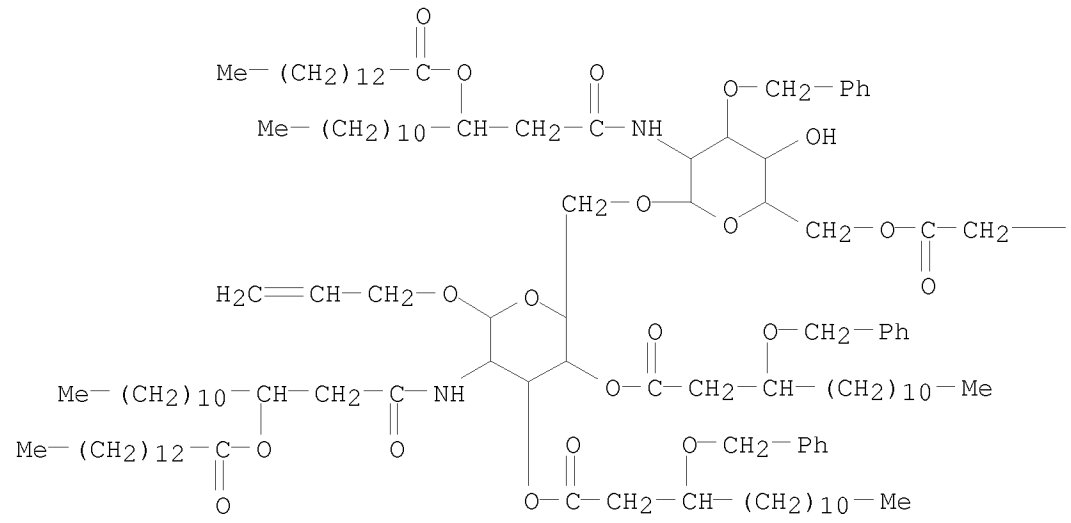
PAGE 1-B

— Me

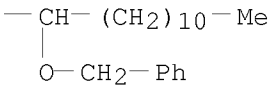
L33 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Chemical synthesis of lipid A for the elucidation of structure-activity relationships
AB A synthetic route for the preparation of an O,N-polyacyl glucosamine β-(1-6)-disaccharide 1,4'-diphosphate, which corresponds to the proposed structure of Salmonella-type lipid A, was developed. Many structural analogs were prepared in order to elucidate the structural requirements for the biol. activities of lipid A.
AN 1984:121491 HCAPLUS <<LOGINID::20081210>>
DN 100:121491
OREF 100:18505a,18508a
TI Chemical synthesis of lipid A for the elucidation of structure-activity relationships
AU Kusumoto, S.; Inage, M.; Chaki, H.; Imoto, M.; Shimamoto, T.; Shiba, T.
CS Fac. Sci., Osaka Univ., Toyonaka, 560, Japan
SO ACS Symposium Series (1983), 231(Bact. Lipopolysaccharides), 237-54
CODEN: ACSMC8; ISSN: 0097-6156
DT Journal
LA English
IT 87357-77-5P 88862-34-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deallylation of)
RN 87357-77-5 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-6-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-, 3,4-bis[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),4(R),6[2(R),6(R)]]-

(9CI) (CA INDEX NAME)

PAGE 1-A

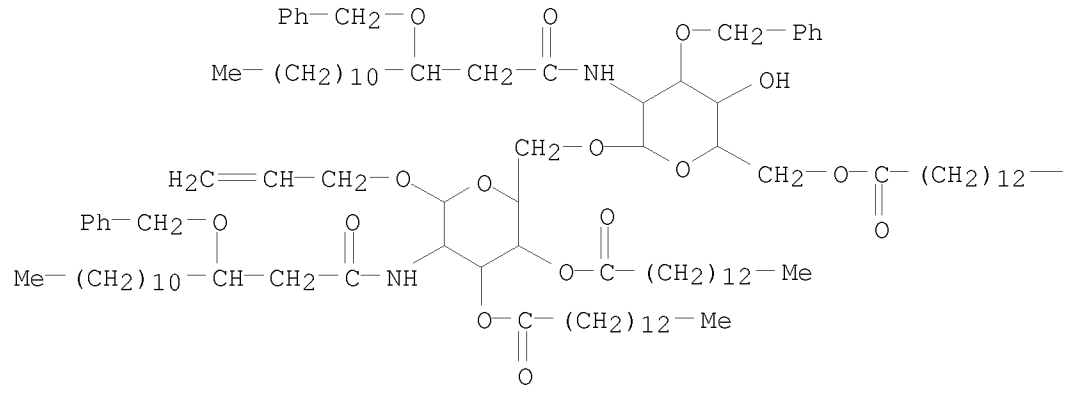


PAGE 1-B



RN 88862-34-4 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(1-oxotetradecyl)-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3,4-ditetradecanoate, [2(R),6(R)]- (9CI) (CA INDEX NAME)

PAGE 1-A

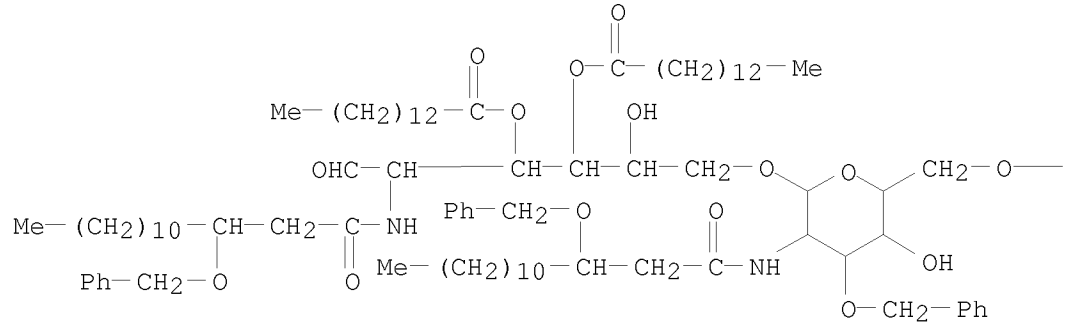


PAGE 1-B

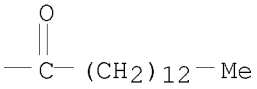
— Me

IT 88862-35-5P 88862-46-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and debenzylation of)
RN 88862-35-5 HCAPLUS
CN D-Glucose, 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(1-oxotetradecyl)-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3,4-ditetradecanoate, [2(R),6(R)]- (9CI) (CA INDEX NAME)

PAGE 1-A

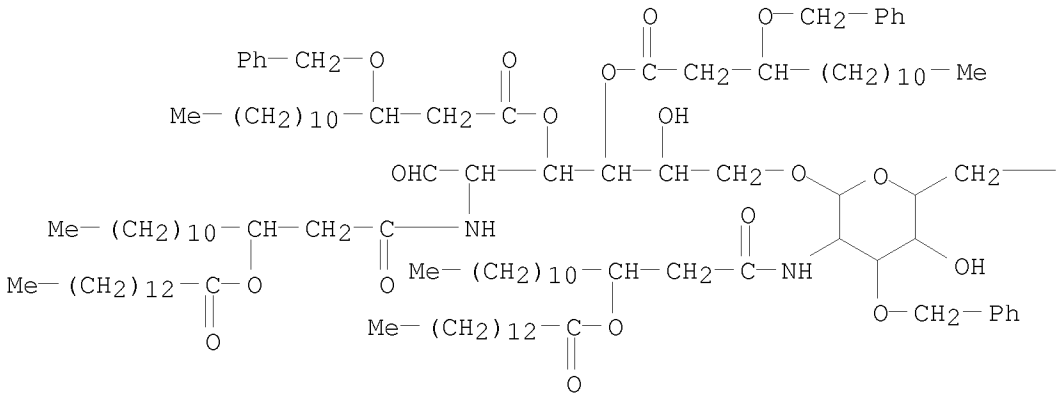


PAGE 1-B

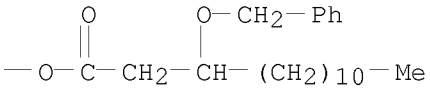


RN 88862-46-8 HCAPLUS
CN D-Glucose, 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-6-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-, 3,4-bis[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),4(R),6[2(R),6(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A

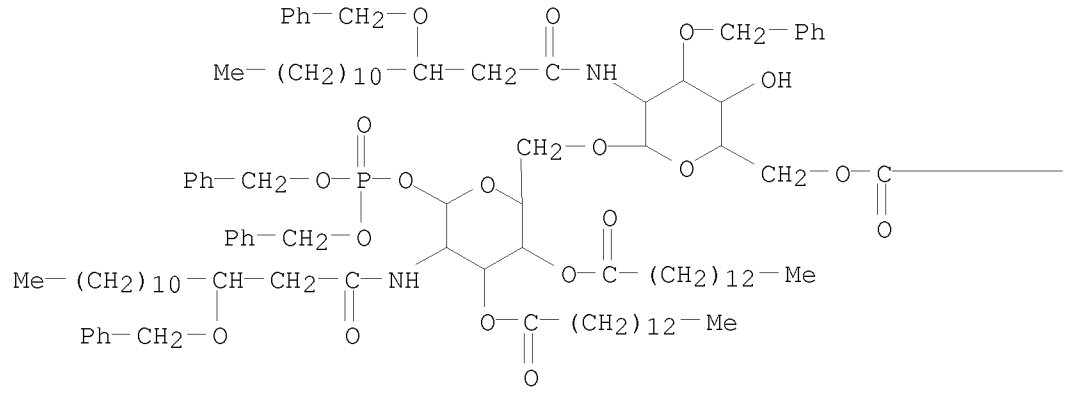


PAGE 1-B



IT 88873-25-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenolysis of)
RN 88873-25-0 HCAPLUS
CN α-D-Glucopyranose, 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(1-oxotetradecyl)-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 1-[bis(phenylmethyl) phosphate] 3,4-ditetradecanoate, [2(R),6(R)]- (9CI) (CA INDEX NAME)

PAGE 1-A

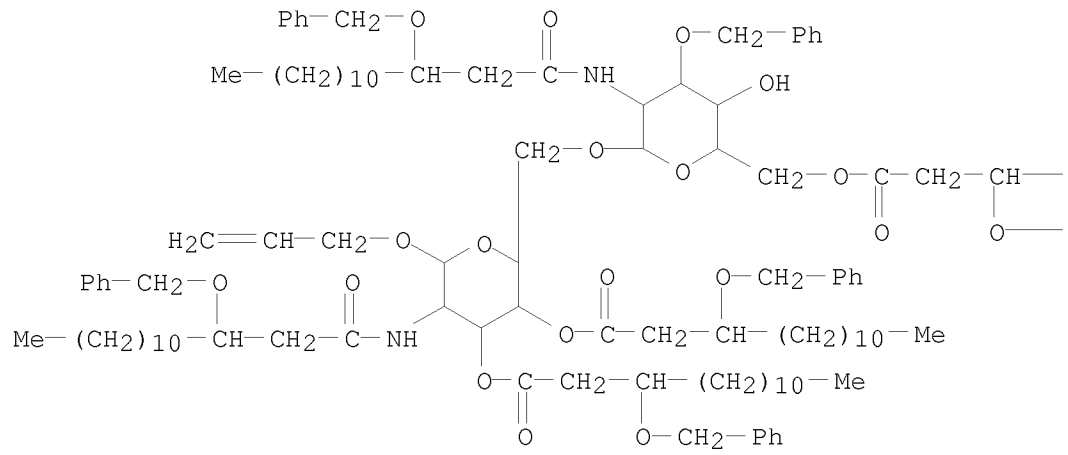


PAGE 1-B

— $(CH_2)_{12}$ — Me

IT 87357-71-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of)
RN 87357-71-9 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-6-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3,4-bis[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),4(R),6[2(R),6(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—— $(CH_2)_{10}$ — Me

— CH_2 — Ph

IT 88862-42-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and trichloroethoxycarbonylation of)
RN 88862-42-4 HCAPLUS
CN β-D-Glucopyranoside, 2-propenyl
2-(acetylamino)-6-O-[2-(acetylamino)-2-deoxy-6-O-[1-oxo-3-
(phenylmethoxy)tetradecyl]-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-
deoxy-, 3,4-bis[3-(phenylmethoxy)tetradecanoate], [3(R),4(R),6(R)]- (9CI)
(CA INDEX NAME)

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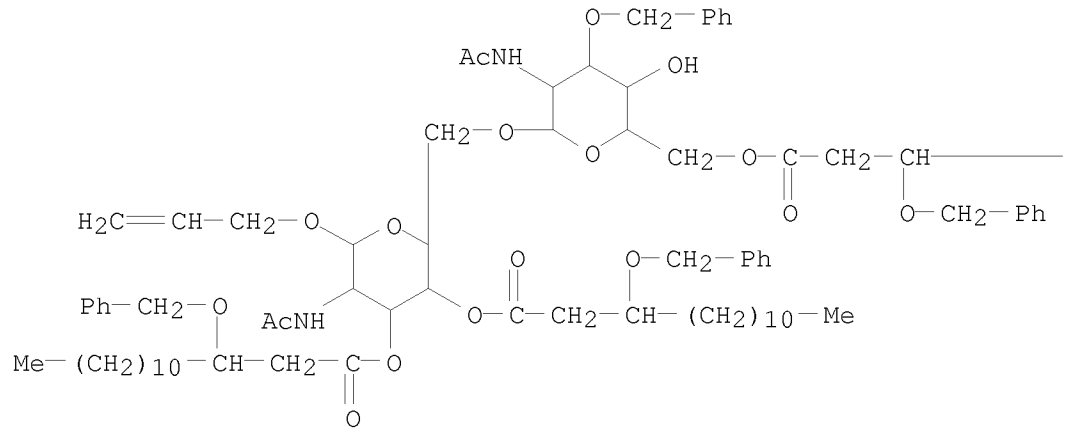
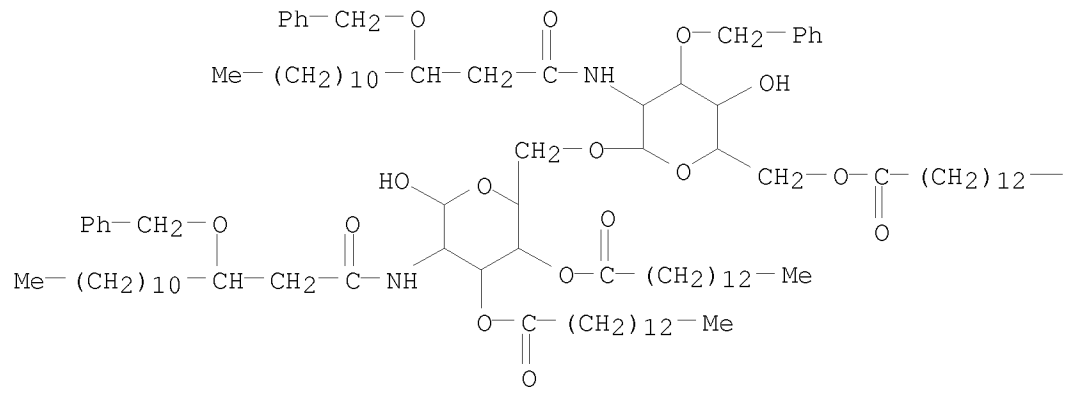


PAGE 1-B

— $(CH_2)_{10}$ — Me

L33 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthetic approach to lipid A: preparation of phosphorylated disaccharides containing (R)-3-hydroxyacyl and (R)-3-acyloxyacyl groups
GI For diagram(s), see printed CA Issue.
AB Seven lipid A analogs I [R1 = tetradecanoyl, (R)-3-hydroxytetradecanoyl; R2 = (R)-3-hydroxytetradecanoyl, (R)-3-tetradecanoyloxytetradecanoyl; R3 and R4 = H, P(O)(OH)2] were prepared from disaccharide II in several steps.
AN 1983:558753 HCAPLUS <<LOGINID::20081210>>
DN 99:158753
OREF 99:24353a,24356a
TI Synthetic approach to lipid A: preparation of phosphorylated disaccharides containing (R)-3-hydroxyacyl and (R)-3-acyloxyacyl groups
AU Inage, M.; Chaki, H.; Imoto, M.; Shimamoto, T.; Kusumoto, S.; Shiba, T.
CS Fac. Sci., Osaka Univ., Osaka, 560, Japan
SO Tetrahedron Letters (1983), 24(19), 2011-14
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
IT 87374-34-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(phosphorylation of, with dibenzyl phosphorochloridate)
RN 87374-34-3 HCAPLUS
CN α-D-Glucopyranose, 2-deoxy-6-O-[2-deoxy-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-6-O-(1-oxotetradecyl)-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-, 3,4-ditetradecanoate, [2(R),6[2(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— Me

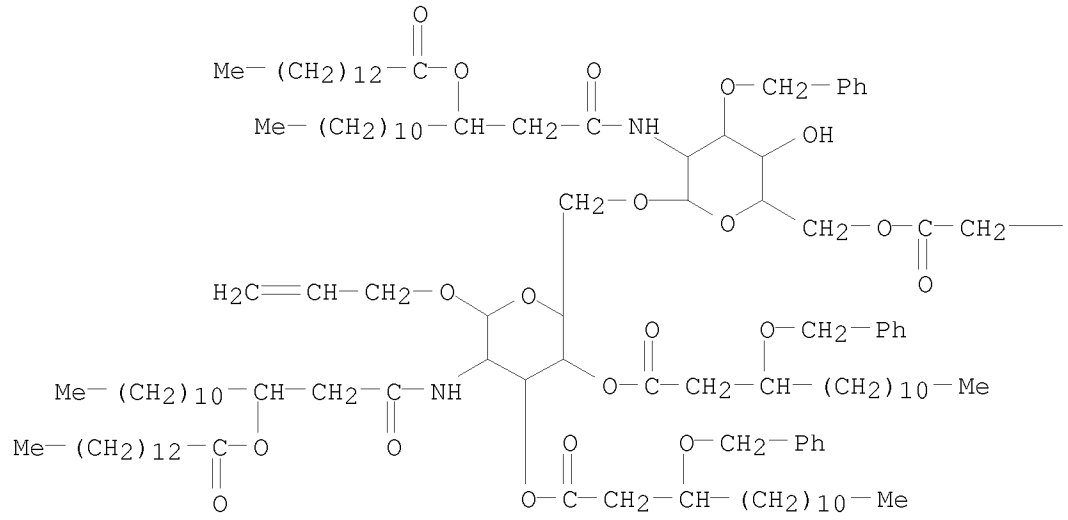
IT 87357-77-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation and deallylation of)

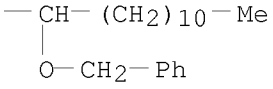
RN 87357-77-5 HCAPLUS

CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-6-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-[(1-oxotetradecyl)oxy]tetradecyl]amino]-, 3,4-bis[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),4(R),6[2(R),6(R)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 87357-71-9P

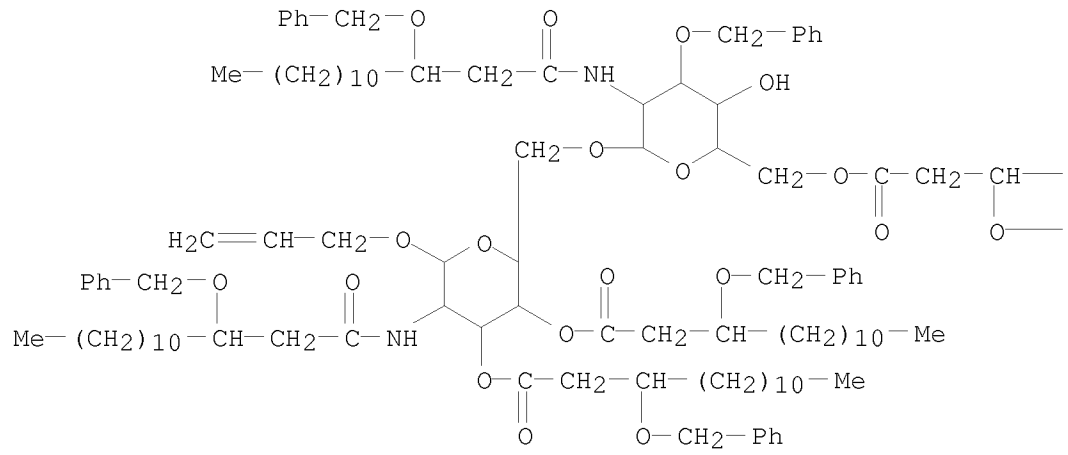
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)

RN 87357-71-9 HCAPLUS

CN β-D-Glucopyranoside, 2-propenyl 2-deoxy-6-O-[2-deoxy-6-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-3-O-(phenylmethyl)-β-D-glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-,

3,4-bis[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),4(R),6[2(R),6(R)]]-
(9CI) (CA INDEX NAME)

PAGE 1-A



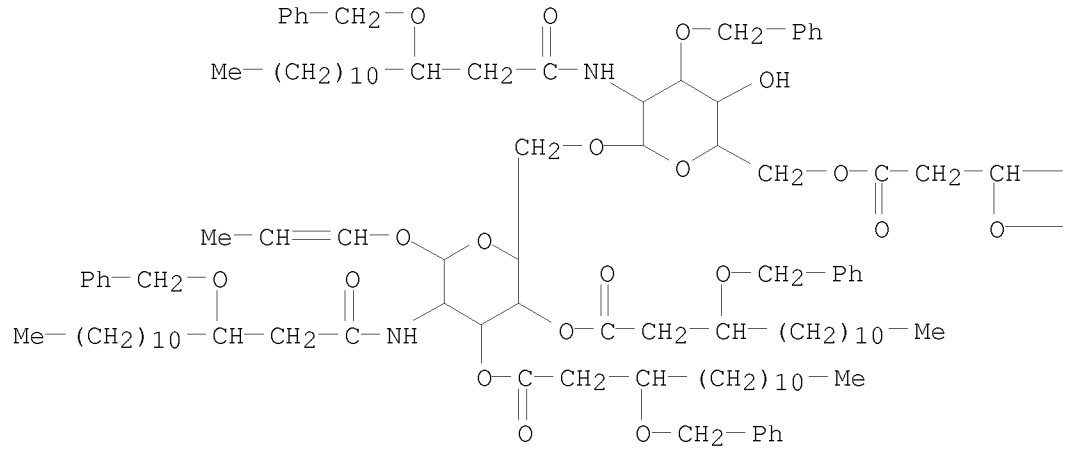
PAGE 1-B

—— $(CH_2)_{10}$—Me

— CH_2—Ph

IT 87374-33-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of, with Ph dihydrogen phosphate)
RN 87374-33-2 HCAPLUS
CN β-D-Glucopyranoside, 1-propenyl
2-deoxy-6-O-[2-deoxy-6-O-[1-oxo-3-(phenylmethoxy)tetradecyl]-2-[[1-oxo-3-
(phenylmethoxy)tetradecyl]amino]-3-O-(phenylmethyl)-β-D-
glucopyranosyl]-2-[[1-oxo-3-(phenylmethoxy)tetradecyl]amino]-,
3,4-bis[3-(phenylmethoxy)tetradecanoate], [2(R),3(R),4(R),6[2(R),6(R)]]-
(9CI) (CA INDEX NAME)

PAGE 1-A

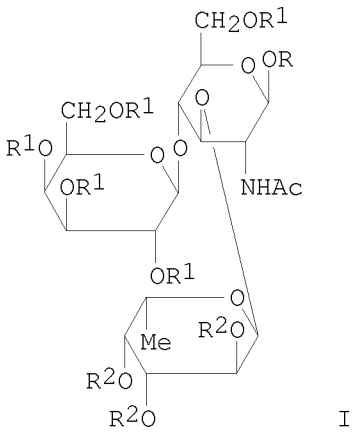


PAGE 1-B

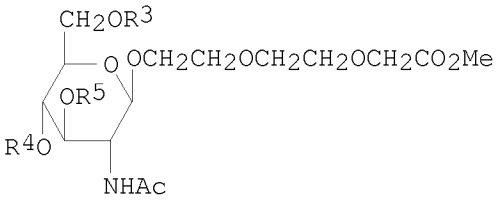
—— $(CH_2)_{10}$—Me

— CH_2—Ph

L33 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI 3-Fucosyl-N-acetyllactosamine derivatives and their biological applications
GI



I



II

AB The tile compds. I [R = (un)substituted alkyl, alkenyl; R1, R2 = H, protective group] were prepared for use as specific antigens and the manufacture of antibodies for the immunochem. detection of types of tumors. Thus HO(CH2CH2O)2H was O-benzoylated, treated with BrCH2CO2Et, and debenzylated to give HO(CH2CH2O)2CH2CO2Me which was treated with acetochloro-N-acetylglucosamine to give II (R3-R5 = Ac). Deprotection and reprotection of II (R3-R5 = Ac) gave II (R3 = Bz, R4 = H, R5 = CH2Ph) which was treated with 1-O-trichloroacetimidyl-2,3,4,6-tetra-O-acetyl-α-D-galactopyranoside and, after debenzylation, with 1O-(N-methylacetimidyl)-2,3,4-tri-O-benzyl-β-L-fucopyranoside to give I [R = O(CH2CH2O)2CH2CO2Me, R1 = acyl, R2 = CH2Ph]. The latter compound was deblocked in 2 stages to give I [R = O(CH2CH2O)2CH2CO2Me, R1 = R2 = H].

AN 1983:471131 HCAPLUS <<LOGINID::20081210>>
DN 99:71131
OREF 99:11062h,11063a

TI 3-Fucosyl-N-acetyllactosamine derivatives and their biological applications

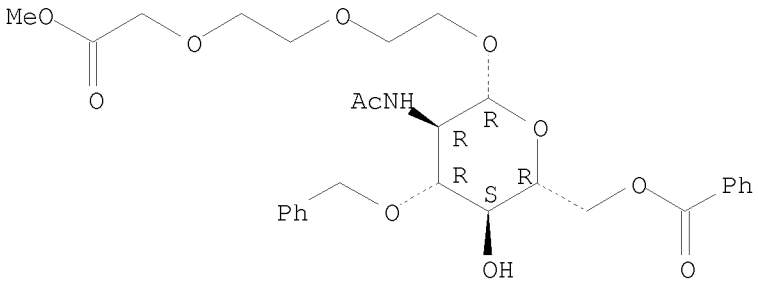
IN Feizi, Ten; Gooi, Hock Chye; Sinay, Pierre
PA Choay S. A., Fr.

SO Eur. Pat. Appl., 47 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 69678	A2	19830112	EP 1982-401292	19820708 <--
EP 69678	A3	19830209		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
FR 2509313	A1	19830114	FR 1981-13447	19810708 <--
JP 58015993	A	19830129	JP 1982-119136	19820708 <--
US 4563445	A	19860107	US 1984-569487	19840109 <--
PRAI FR 1981-13447	A	19810708 <--		

US 1982-396193 A1 19820708 <--
OS MARPAT 99:71131
IT 86520-62-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with trichloroacetimidoyltetraacetylgalactose)
RN 86520-62-9 HCAPLUS
CN Acetic acid, [2-[2-[[2-(acetylamino)-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-β-D-glucopyranosyl]oxy]ethoxy]ethoxy]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Glucosamine-peptide derivatives and their use
GI For diagram(s), see printed CA Issue.
AB Glucosamine peptides I [R = alkyl, hydroxyalkyl, aralkyl; R1 = H, acyl, cycloalkylacyl; R2 = H, alkyl; m = 0, 1; n = 0-9; R3 = H, alkyl; R4, R5 = H, alkyl, hydroxyalkyl; R8, R9 = H, alkyl, aralkyl] were prepared and had immunostimulating, antiinfectious, and antitumor activity. Thus, acylating muramylvalylisoglutaminate II with PhCH2O2C-Gly-OC6H4NO2-4 and then hydrogenolysis and acylating with nitrophenyl 10-(2,3-dimethoxy-5-methyl-1,4-benzoquinon-6-yl)decanoate gave muramyl peptide III. III at 100 μg inhibited growth of Meth-A tumor cells in mice 4 wk.
AN 1981:175559 HCAPLUS <<LOGINID::20081210>>
DN 94:175559
OREF 94:28711a
TI Glucosamine-peptide derivatives and their use
IN Yamamura, Yuichi; Azuma, Ichiro; Shigeru, Kobayashi
PA Takeda Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 113 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 14984	A1	19800903	EP 1980-100811	19800218 <--
	EP 14984	B1	19821201		
	R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	JP 55111499	A	19800828	JP 1979-19929	19790221 <--
	JP 62044555	B	19870921		
	AT 1906	T	19821215	AT 1980-100811	19800218 <--
	US 4369178	A	19830118	US 1980-123401	19800221 <--
	CA 1239636	A1	19880726	CA 1980-346133	19800221 <--
PRAI	JP 1979-19929	A	19790221 <--		

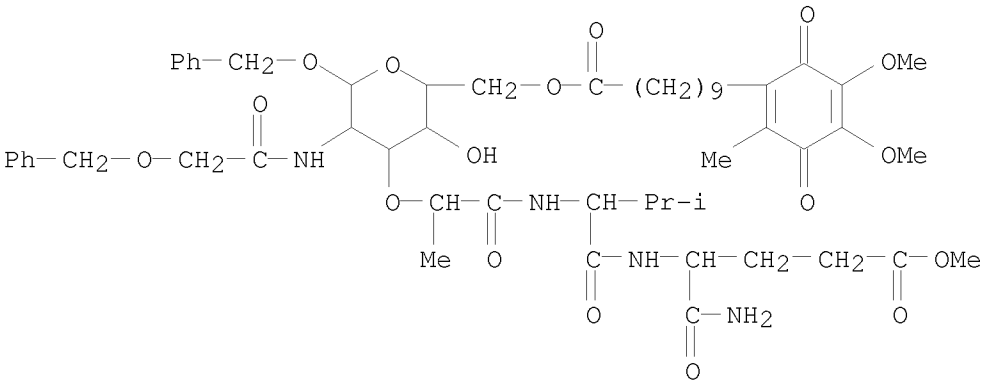
EP 1980-100811 A 19800218 <--

OS MARPAT 94:175559

IT 77277-42-0P 77277-57-7P 77290-25-6P
77290-27-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenolysis of)

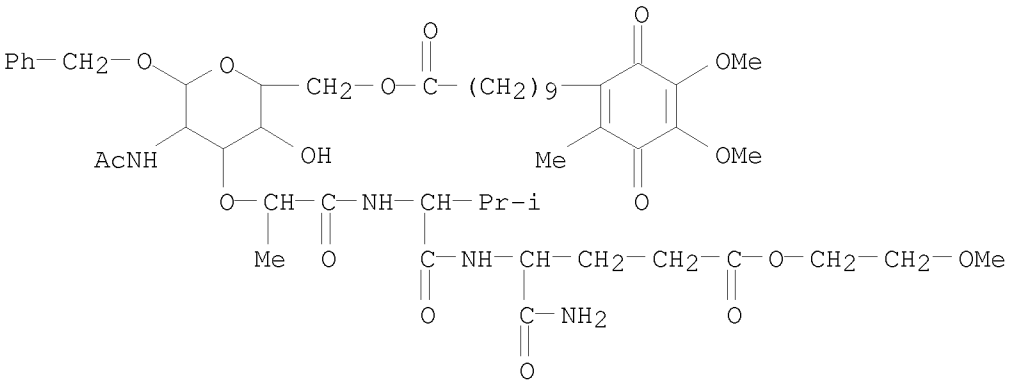
RN 77277-42-0 HCAPLUS

CN D-α-Glutamine, N2-[N-[6-O-[10-(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)-1-oxodecyl]-N-[(phenylmethoxy)acetyl]-1-O-(phenylmethyl)-α-muramoyl]-L-valyl]-, methyl ester (9CI) (CA INDEX NAME)



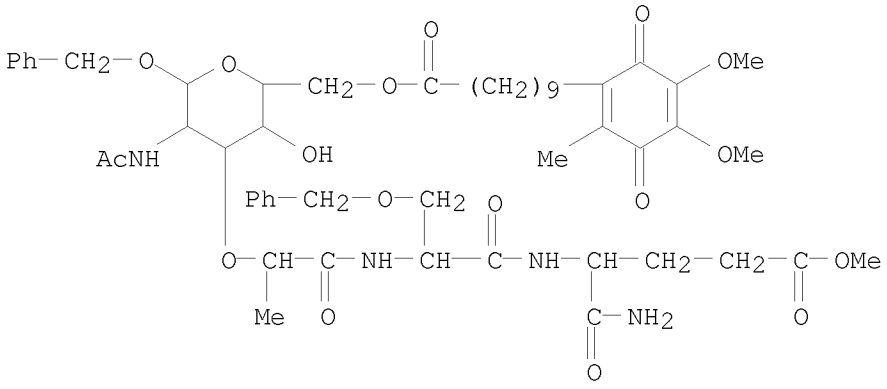
RN 77277-57-7 HCAPLUS

CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-[10-(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)-1-oxodecyl]-1-O-(phenylmethyl)-α-muramoyl]-L-valyl]-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



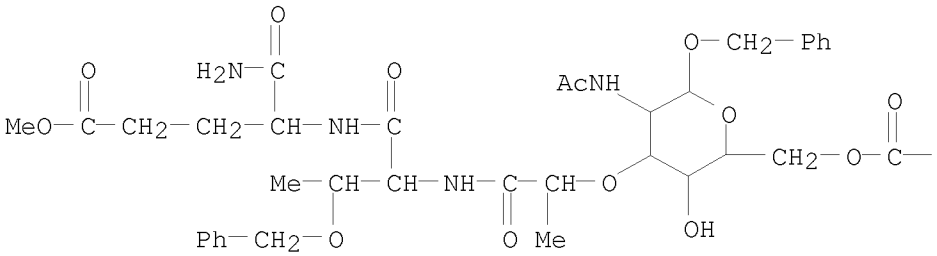
RN 77290-25-6 HCAPLUS

CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-[10-(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)-1-oxodecyl]-1-O-(phenylmethyl)-α-muramoyl]-O-(phenylmethyl)-L-seryl]-, methyl ester (9CI) (CA INDEX NAME)

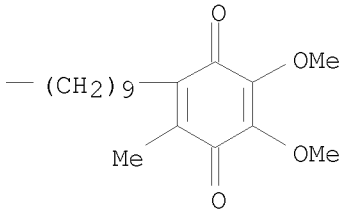


RN 77290-27-8 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-6-O-[10-(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)-1-oxodecyl]-1-O-(phenylmethyl)-α-muramoyl]-O-(phenylmethyl)-L-threonyl]-, methyl ester (9CI) (CA INDEX NAME)

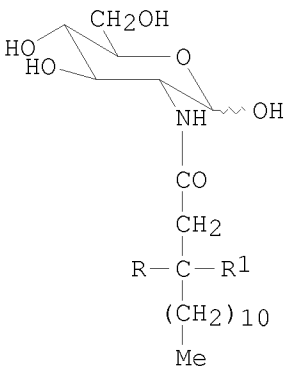
PAGE 1-A



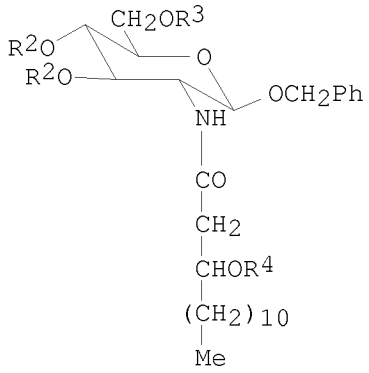
PAGE 1-B



L33 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI A convenient synthesis of 2-deoxy-2-(D- and L-3-hydroxytetradecanoylamino)-D-glucose: diastereoisomers of the monomeric, lipid A component of the bacterial lipopolysaccharide
GI



I



II

AB The title aminoglucoses (I; R = H, R1 = OH; R = OH, R1 = H) were prepared from diastereoisomeric glucopyranoside II (R2 = R3 = Ac, R4 = H) (III) in several steps. III was in sequence treated with MeO(CH2)2OCH2Cl, deacetylated, and tritylated at which stage the resultant isomers (ratio 1:1) D- and L-II [R2 = H, R3 = Ph3C, R4 = MeO(CH2)2OCH2] were separated by chromatog. on silica gel. The isomers were converted into the corresponding title compds. in 5 steps.

AN 1981:175404 HCAPLUS <<LOGINID::20081210>>

DN 94:175404

OREF 94:28679a,28682a

TI A convenient synthesis of 2-deoxy-2-(D- and L-3-hydroxytetradecanoylamino)-D-glucose: diastereoisomers of the monomeric, lipid A component of the bacterial lipopolysaccharide

AU Kiso, Makoto; Nishiguchi, Hisao; Murase, Satoshi; Hasegawa, Akira

CS Dep. Agric. Chem., Gifu Univ., Kakamigahara, 504, Japan

SO Carbohydrate Research (1981), 88(1), C5-C9
CODEN: CRBRAT; ISSN: 0008-6215

DT Journal

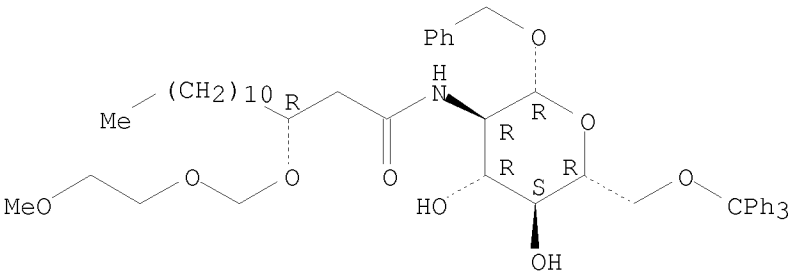
LA English

IT 77364-30-8P 77364-31-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and detritylation of)

RN 77364-30-8 HCAPLUS

CN β-D-Glucopyranoside, phenylmethyl 2-deoxy-2-[[3-[(2-methoxyethoxy)methoxy]-1-oxotetradecyl]amino]-6-O-(triphenylmethyl)-, (R)- (9CI) (CA INDEX NAME)

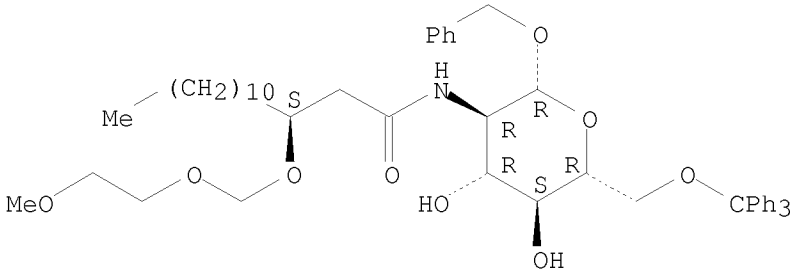
Absolute stereochemistry.



RN 77364-31-9 HCAPLUS

CN β-D-Glucopyranoside, phenylmethyl
2-deoxy-2-[[3-[(2-methoxyethoxy)methoxy]-1-oxotetradecyl]amino]-6-O-
(triphenylmethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Glucosamine peptide derivatives and their pharmaceutical compositions
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Acetylmuramyl dipeptide derivs. I [n = O, R = H, alkyl; n = 1-9, R = H, NH2; R1 and R2 = alkyl; R3 and R4 = H, alkyl, CH2OH; R5 and R6 = CO2H, CONH2; R7 = H, R8CO (R8 = acyclic hydrocarbon which can be ω-substituted by cycloalkyl), Q (l = 1-9; m = 0-9; t = 2-100; R8 and R9 = H, alkyl; R10 = alkyl, CO2H which can be esterified, OH which can be etherified, pyrrolidino which can be substituted)] were prepared as immunostimulants. Thus, acetylmuramyl dipeptide II (R11 = H) was esterified with Z-β-Ala-OC6H4NO2-p (Z = PhCH2O2C) to give II (R11 = Z-β-Ala), which was hydrogenated over Pd/C to give β-alanylmuramic acid derivative III (R12 = H) (IV). IV was N-acylated with CH2:CMeCO2Su (Su = succinimido) to give III (R12 = CH2:CMeCO) (V), which was polymerized to give the homopolymer of V. V was copolymd. with N-vinyl-2-pyrrolidone, stearyl vinyl ether, and tridecyl methacrylate to give the resp. copolymers. The cell-mediated immunostimulatory activities of several I were tested.
AN 1980:198783 HCAPLUS <<LOGINID::20081210>>
DN 92:198783
OREF 92:32226h,32227a
TI Glucosamine peptide derivatives and their pharmaceutical compositions
IN Yuichi, Yamamura; Ichiro, Azuma; Shigeru, Kobayashi
PA Takeda Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 80 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 2677	A1	19790711	EP 1978-101524	19781202 <--
	EP 2677	B1	19821013		
	R: CH, DE, FR, GB, IT				
	JP 54079227	A	19790625	JP 1977-145415	19771202 <--

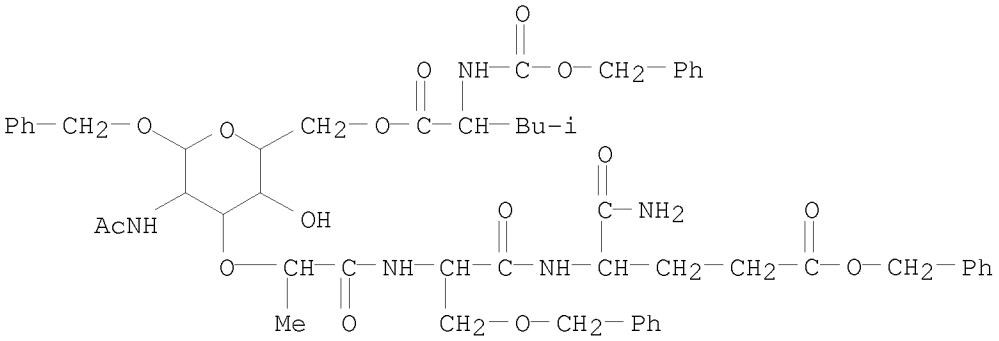
	JP 54079228	A	19790625	JP 1977-145416	19771202 <--
	JP 02033719	B	19900730		
	JP 54120696	A	19790919	JP 1978-28012	19780310 <--
	JP 63000446	B	19880107		
	US 4430265	A	19840207	US 1982-393870	19820630 <--
PRAI	JP 1977-145415		19771202 <--		
	JP 1977-145416		19771202 <--		
	JP 1978-28012		19780310 <--		
	US 1978-962033	A1	19781120 <--		
	US 1981-249902	A1	19810401 <--		

OS MARPAT 92:198783

IT 73341-32-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenolysis of)

RN 73341-32-9 HCAPLUS

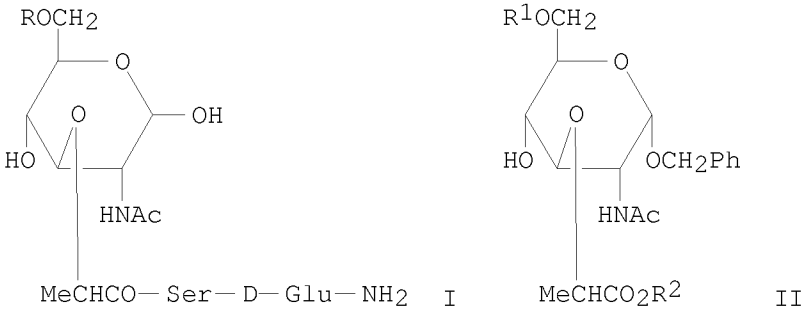
CN D-α-Glutamine, N-[N-[N-acetyl-1-O-(phenylmethyl)-α-muramoyl]-O-(phenylmethyl)-L-seryl]-, phenylmethyl ester, 6'-ester with N-[(phenylmethoxy)carbonyl]-L-leucine (9CI) (CA INDEX NAME)



L33 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Muramyldipeptide derivatives

GI



I

II

AB Muramyl dipeptides I (R = mycoloyl, norcardomycoloyl) were prepared as antitumor agents. Thus, muramic acid II (R1 = R2 = H) was esterified with

Ph2CN2 in THF and tosylated with tosyl chloride in pyridine to give II (R1 = tosyl, R2 = CHPh2), which was treated with K mycolate in refluxing benzene containing 18- crown-6 for 3 h to give II (R1 = mycoloyl, R2 = CHPh2) (III). III was deblocked with CF3CO2H/anisole to give II (R1 = mycoloyl, R2 = H), which was condensed with H-Ser(CH2Ph)-D-Glu(OCH2Ph)-NH2 by dicyclohexylcarbodiimide/N-hydroxysuccinimide to give the protected muramyl dipeptide, which was hydrogenated over Pd/C in THF to give I (R = mycoloyl). Data are given for activities of I against diethylnitrosamine-induced liver cancer cells in guinea pigs.

AN 1979:611832 HCAPLUS <<LOGINID::20081210>>
DN 91:211832
OREF 91:34149a,34152a
TI Muramyldipeptide derivatives
IN Yamamura, Yuichi; Shiba, Tetsuo; Azuma, Ichiro; Kusumoto, Shoichi; Hirayama, Tadachika; Hiba, Tsuneo
PA Daiichi Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 54073729	A	19790613	JP 1977-137088	19771115 <--
JP 60033120	B	19850801		
PRAI JP 1977-137088	A	19771115 <--		

IT 71921-85-2DP, 6-O-mycoloyl derivative
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of)
RN 71921-85-2 HCAPLUS
CN D-α-Glutamine, N2-[N-[N-acetyl-1,6-bis-O-(phenylmethyl)-α-muramoyl]-O-(phenylmethyl)-L-seryl]-, phenylmethyl ester (9CI) (CA INDEX NAME)